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# DEPARTMENT OF TRANSPORTATION AND RELATED AGENCIES APPROPRIATIONS FOR 1995

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Department of Transportation and Re...

## RINGS

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS

HOUSE OF REPRESENTATIVES

ONE HUNDRED THIRD CONGRESS

SECOND SESSION

SUBCOMMITTEE ON THE DEPARTMENT OF TRANSPORTATION AND RELATED AGENCIES APPROPRIATIONS

**BOB CARR, Michigan, *Chairman***

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DELACROIX DAVIS III, RICHARD E. EFFORD, CHERYL L. SMITH, and LINDA J. MUIR,
*Subcommittee Staff*

## PART 5

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- **National Highway Traffic Safety Administration** .... **1**
- **Research and Special Programs Administration** ..... **615**

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# DEPARTMENT OF TRANSPORTATION AND RELATED AGENCIES APPROPRIATIONS FOR 1995

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TUESDAY, MARCH 15, 1994.

## NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

### WITNESSES

**CHRISTOPHER A. HART, ACTING ADMINISTRATOR**

**BARRY FELRICE, ASSOCIATE ADMINISTRATOR FOR RULEMAKING**

**MICHAEL BROWNLEE, ASSOCIATE ADMINISTRATOR FOR TRAFFIC SAFETY PROGRAMS**

**ADELE DERBY, ASSOCIATE ADMINISTRATOR FOR REGIONAL OPERATIONS**

**GEORGE PARKER, ASSOCIATE ADMINISTRATOR FOR RESEARCH AND DEVELOPMENT**

**DONALD C. BISCHOFF, ASSOCIATE ADMINISTRATOR FOR PLANS AND POLICY**

**WILLIAM A. BOEHLY, ASSOCIATE ADMINISTRATOR FOR ENFORCEMENT**

**LOUISE STOLL, ASSISTANT SECRETARY FOR BUDGET AND PROGRAMS, OFFICE OF THE SECRETARY**

### OPENING REMARKS

Mr. CARR. I want to welcome you to the hearing today. We will review the fiscal year 1995 budget request for the National Highway Traffic Safety Administration. NHTSA does a good job as the federal agency most concerned with automobile safety and safety on our Nation's highways, and the establishment and enforcement of all the motor vehicle safety standards—a very important activity of the federal government. Your fiscal year 1995 budget request is $277.2 million, which is a decrease of $21 million below the 1994 level.

We are pleased to welcome the Deputy Administrator, Chris Hart, in your first appearance in this capacity before the Subcommittee. Chris is well-known to us from his days at the NTSB. We are delighted with the fact that you bring a lot of experience, particularly in the area of engineering, to your new post.

I want to also welcome the Assistant Secretary for Budget and Programs, Louise Stoll, to the subcommittee. You are a welcome participant in all of our hearings.

Mr. Hart, we will put your entire statement in the record. In the interest of time, perhaps you would like to make a few summary comments. We could then get right to some questions.

I want to say that Mr. Wolf is on his way and I understand he will be here shortly.

## OPENING STATEMENT

Mr. HART. Thank you, Mr. Chairman, and good morning. I appreciate the opportunity to make my first appearance before the subcommittee for the purpose of presenting the Agency's budget request for fiscal year 1995. Secretary Peña is a strong supporter of our program, as you know, and he has been personally involved in setting challenging goals for NHTSA, and I am pleased Louise Stoll, the Department's Assistant Secretary for Budget and Programs could be with me today as an expression of the Secretary's support for our budget request.

Mr. Chairman, as you know, before coming to NHTSA, I was involved with transportation safety at the National Transportation Safety Board and my experience has been that you need to work in tandem with Congress and that especially with the appropriations committees in order to do an effective job in solving difficult safety problems.

The program we are proposing for 1995 will address a number of issues that you have identified in past hearings. For example, we are emphasizing our technical support to help States implement effective laws and programs to improve alcohol safety, including more enforcement of underage drinking laws and provisional licensing for young drivers.

The Agency's senior managers have also joined me today in order to respond in greater detail to your questions about program plans and about the level of funding we believe is necessary to carry out the responsibilities assigned to us by Congress.

The associate administrators on my right are Barry Felrice for Rulemaking, Bill Boehly for Enforcement, and George Parker for Research and Development. And on my left are Don Bischoff for Plans and Policy, Adele Derby for Regional Operations, and Mike Brown for Traffic Safety Programs.

## FISCAL YEAR 1995 BUDGET

Mr. Chairman, the agency designed its 1995 budget to effectively and efficiently carry out increased safety needs on a national level and to cover expanded responsibilities that are directed by Congress. We envision an active Federal presence that will ensure that major traffic safety issues are addressed. The budget maximizes our resources for safety efforts at the same time the agency de-emphasizes or terminates functions that are marginally related to safety or that we have found to be ineffective.

## TRAFFIC SAFETY TRENDS

Traffic safety has improved considerably since Congress enacted the motor vehicle and highway safety laws in 1966. Programs throughout the country have improved, traffic safety enormously reflecting efforts at all levels of society, government, business, nonprofit organizations and citizen volunteers. As a result, the number of traffic fatalities have been reduced substantially below the 1966 level and during the same period, the traffic fatality rate calculated using vehicle miles of travel has come down consistently and is now at its lowest level on records.

Despite these improvements in safety, our job is far from complete. After declining in absolute terms for many years, the number of traffic fatalities increased slightly during 1993. Our preliminary estimates placed the level of deaths at approximately 39,850 in 1993, more than 600 higher than in 1992. Just as troubling are the number of injuries in traffic crashes that exceeded 5 million last year and is increasing.

When we assess total transportation safety in the United States, we see some 94 percent of transportation deaths, and 99 percent of the injuries occur in motor vehicle crashes, which are the number one cause of death for persons between ages 5 and 34.

## SOCIETAL COST OF CRASHES

In strictly economic terms, crashes cost society $137.5 billion in 1990 alone. This in no way accounts for personal losses, pain and suffering and emotional impact. A traffic fatality represents the kind of premature death that the subcommittee focused on in last year's hearings. That is certainly the case when a crash ends a young life during formative years or kills a person just starting a family and career. The programs I am presenting today are designed to address these issues of public, personal loss and economic loss.

## HEALTH CARE COSTS

Before summarizing our budget request, I want to spend a moment on how the cost of health care has been driven up. As Congress, the Administration, and the private sector study the health care system, we are examining how the agency's programs can make a contribution toward reducing health care costs. We have very conservative estimates of the impact of traffic deaths and injuries on health care costs—over $14 billion annually. Almost 30 percent of this cost, over $4 billion, is made by medicare and medicaid.

We see health care rising at over twice the rate of inflation, generally. Consequently, if we keep health care costs holding at their current levels—which is clearly undershooting our real goal—we estimate it would reduce total health care costs by over a billion dollars a year.

Our studies indicate Federal dollars invested in traffic safety are highly cost effective. The effectiveness of projects compared with their cost was a major consideration when NHTSA developed its budget for 1995.

## SECRETARY'S GOALS

Our fiscal year 1995 program and budget were designed to achieve the Secretary's goals to reduce motor vehicle deaths and to direct more attention and resources to reducing and preventing crash injury. More specifically, the Secretary has tasked NHTSA to increase safety belt use to 75 percent, up from 62 percent in 1992, and to reduce the proportion of alcohol-related crash deaths to 43 percent, down from almost 46 percent in 1992, both goals to be accomplished by 1997.

Achieving these two goals would save an additional 2,900 lives a year, prevent thousands of injuries and reduce annual health care costs by nearly a billion dollars.

## NHTSA'S BUDGET REQUEST

The agency is requesting $277.2 million for its fiscal year 1995 budget, which is $21 million less than our fiscal year 1994 budget. This program provides $126 million for the operations and research program, and $151 million for highway safety grants to the States.

The operations and research budget supports the entire spectrum over agency efforts to improve vehicle, driver and pedestrian safety. It also enables NHTSA to carry out supporting research and development, provide technical assistance to improve State and local safety programs and manage a national crash and safety information system that has proven essential to government industry and public safety activities.

## COMBINED ALCOHOL-BELT PROGRAM

NHTSA also intends to launch a new program in fiscal year 1995 combining impaired driving and occupant protection which is being developed in fiscal year 1994 in cooperation with States and the highway safety community. We are able to employ this comprehensive approach because alcohol and belt safety have each relied upon the same strategies, education to garner public awareness, passage of stronger state laws, and effective law enforcement.

We believe this combined alcohol belt program will be our most effective new approach to reduce crashes, deaths and injuries and it will be essential for achieving the Secretary's traffic safety goals I outlined earlier.

To support the combined program plus related projects, we are requesting $8.3 million for alcohol safety and $5.7 million for the National Occupant Protection Program. Improving the safety of two groups of motorists is of special concern to the agency, namely younger and older drivers.

## VEHICLE SAFETY RULEMAKING

For fiscal year 1995, we have asked for $739,000 to carry out research outlined in the plan we transmitted to Congress last year. The majority of the Agency's vehicle regulatory activities in the past two years has focused on timely implementation of rulemaking mandated by testimony of the Intermodal Surface Transportation Efficiency Act of 1991 commonly known as ISTEA.

Rules requiring full frontal air bag protection in all passenger vehicles and upgraded side impact protection were issued by NHTSA along with other rulemaking activities legislated by Congress.

The $3.7 million requested in the budget supports the legislation of ISTEA and initiation of vehicle safety work in other areas. These include increased occupant protection in rollover crashes, improved braking provided by anti-lock brake systems on passenger vehicles and rear impact guards on truck trailers to reduce underride by smaller vehicles. We also intend to look at the safety of electric and alternatively fueled vehicles.

## ENFORCEMENT PROGRAM

The agency requests $8.4 million for its enforcement program for fiscal year 1995. This will support a thorough compliance testing of vehicles to be certain that the public receives the safety benefits promised by newer upgrade graded standards, many of which have been mandated by Congress. At the same time, we manage vigorous defect investigation efforts to identify vehicles with safety defects and make certain that they are recalled for corrective action by the manufacturer.

We will continue to operate the agency's auto safety hotline in order to provide safety information requested by consumers and our goal is to build a partnership with motorists because the information they provide to NHTSA over the hotline serves as the foundation for determining the existence of possible safety defects.

## SIMULATOR PROGRAM

New research tools, like the motion-based simulator, are essential in the U.S. to move successfully to future improvement in driver and vehicle safety. The National Advanced Driving Simulator will be an important tool to improve our understanding of the role of human factors in crashes, which is essential for improving vehicle crash avoidance.

## IVHS PROGRAM

The Agency's responsibilities in the Department's Intelligent Vehicles Highway Systems Program is to foster development and transition to the industry of cost-effective, driver friendly, collision avoidance systems. IVHS, like the simulator, is an essential research tool for bringing capabilities in crash avoidance into widespread commercial uses.

To support the IVHS activities in 1995, the agency is seeking $7.3 million. This will be augmented by $10 million requested for NHTSA by the Federal Highway Administration to support the work that is crucial to the successful completion of Federal highway projects and the automated highway system project. Our goal in the Department's IVHS on mobility enhancement is to make sure new technology matches up successfully with driver capability.

## HIGHWAY SAFETY GRANTS

We are requesting $123 million for the Section 402 grants to state and Community Highway Safety Programs, the same amount Congress appropriated for fiscal year 1994. States target their 402 grants to improve their program effectiveness in addressing major issues such as alcohol safety, occupant restraints, and speeding.

Section 402 gives States the flexibility to respond to their own unique safety needs and at the same time address the national safety priorities that are enacted by Congress.

The agency proposes funding of $25 million for the Section 410 Alcohol–Impaired Driving Countermeasures Grant program, which is requested at the fully authorized amount in order to encourage

States to pass stronger laws and start more effective programs to reduce drunk and drugged driving. Section 410 has been a major influence on recent State enactment of the .08 VOC laws and administrative license revocation.

Mr. Chairman, this concludes my summary of the 1995 program and budget. We would be very pleased to answer any questions that you may have.

[The prepared statement and biography of Christopher Hart follow:]

# STATEMENT OF CHRISTOPHER A. HART
ACTING ADMINISTRATOR
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
BEFORE THE TRANSPORTATION SUBCOMMITTEE
OF THE
COMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES
MARCH 15, 1994

Mr. Chairman and Members of the Subcommittee:

Before presenting the FY 1995 Budget request of the National Highway Traffic Safety Administration (NHTSA), I would like to say that it is an honor to make my first appearance before your subcommittee, and to assure you and the other members of the Secretary's commitment to improving traffic safety. I am pleased to have with me today Louise Stoll, our Assistant Secretary for Budget and Programs, on behalf of the Office of the Secretary.

Mr. Chairman, you and the other members have been strong supporters of traffic safety, and I want to take this opportunity before beginning my statement to acknowledge your contributions. I look forward to continuing the agency's close relationship with your subcommittee.

Accompanying me today to assist in providing answers to your questions, and seated to my right, are Barry Felrice, Associate Administrator for Rulemaking; Bill Boehly, Associate Administrator for Enforcement; and George Parker, Associate Administrator for Research and Development. Seated to my left are Don Bischoff, Associate Administrator for Plans and Policy; Adele Derby, Associate Administrator for Regional Operations; and Mike Brownlee, Associate Administrator for Traffic Safety Programs.

## Introduction

As you know, Mr. Chairman, NHTSA's mission is to improve traffic safety in the United States by reducing crashes, deaths and injuries, and their human consequences and direct economic costs. The overall economic impact of these crashes is enormous. NHTSA estimates that highway crashes produced a direct economic cost to society of $137.5 billion in 1990. President Clinton and Secretary Peña believe that NHTSA's mission of saving lives and reducing injuries is one of the highest priorities of the Department of Transportation. NHTSA's budget proposal for FY 1995 focuses on both motor vehicle and occupant safety, and addresses behavioral issues affecting the safety of drivers, passengers and pedestrians.

The agency is encouraged by significant progress made in motor vehicle and highway safety in recent years. America's roads have become safer as a result of NHTSA's efforts, and its work with states, to improve traffic safety. The traffic fatality rate in 1993 is estimated to have declined to 1.7 fatalities per 100 million vehicle miles of travel, which is the lowest level on record. Nevertheless, much remains to be done. This is illustrated by the fact that the total number of traffic fatalities for 1993 reversed its downward trend in recent years and rose to an estimated level of 39,850 deaths, compared to 39,235 deaths in 1992.

An assessment of overall transportation safety in the United States indicates that 94 percent of the fatalities and 99 percent of the injuries result from motor vehicle crashes. Vehicle crashes remain the number one cause of death for persons of the ages of 5-34, the primary cause of death due to injuries of any kind, and the fifth leading cause of death overall. This is a public health problem of critical dimensions, and a staggering economic burden results from it.

We are continuing to focus our attention and resources on a major agency priority, the need to prevent and reduce injuries in crashes. There are, for example, 120 non-fatal motor vehicle injuries for every fatality, and in 1990 injuries resulted in an aggregate cost 2.2 times the cost of fatalities. It is estimated that an average of $35 thousand in health care costs is saved for each serious injury prevented.

The annual health care cost of motor vehicle crash injuries is conservatively estimated at $14.2 billion. Nearly thirty percent of this cost, over $4 billion, is paid by Medicare and Medicaid. Given that U.S. health care costs are increasing at more than twice the overall rate of inflation, merely holding crash injury costs at their current levels -- and this clearly undershoots our real goal -- will reduce health care costs by over $1 billion annually. Moreover, reductions in death and injury from motor vehicle crashes will help to contain health care costs and reduce the tax burden needed to support the nation's health care system.

The agency's FY 1995 budget request is designed to continue and strengthen programs that meet the Secretary's goals to reduce the costs of motor vehicle-related crashes. NHTSA has developed strategies for reducing these costs by achieving goals to increase safety belt use and reduce drunk driving; implementing other critical highway safety improvements; and advancing state-of-the-art crashworthiness and crash avoidance technologies.

The Secretary's goal is to achieve a national safety belt use rate of 75 percent by 1997, compared to 62 percent in 1992. This would save 1,700 additional lives per year in passenger cars alone, and prevent thousands of injuries, thereby reducing overall health care costs by $684 million. The Secretary's goal for drunk driving prevention is to reduce the percentage of alcohol-related traffic deaths to 43 percent by 1997, compared to 45.8 percent in 1992. It is estimated that meeting this objective will save an additional 1,200 lives each year and reduce annual health care costs by $282 million.

The agency has a solid record of achievement. In the last 10 years alone, safety belt use has increased by 50 percentage points and the proportion of alcohol-related deaths is down by 11 percentage points. NHTSA's programs are major factors in efforts to reduce health care costs, contain business costs, and reduce taxes. To make an even greater contribution to reductions in health care costs in the future, the agency must intensify its focus on injury prevention while continuing its mission to save lives.

Today, I will summarize NHTSA's FY 1995 budget request and highlight some of the recent accomplishments and planned initiatives. I will then be pleased to answer your questions.

The Budget Request

NHTSA's FY 1995 budget request totals $277.2 million, consisting of $125.8 million for the Operations and Research Program and $151.4 million for highway traffic safety grants to the states. The FY 1995 request represents a $20.9 million decrease from the budget level enacted by Congress for FY 1994. This reduction reflects the conclusion of the Section 153 Safety Belt and Motorcycle Helmet Incentive Grants and the Section 408 Alcohol Safety Incentive Grants, since their funding authorizations cease at the end of FY 1994. The agency designed the FY 1995 program and budget to maximize our resources for safety activities at the same time we de-emphasize or terminate functions only marginally related to safety or found to be ineffective.

Budget Highlights

The $125.8 million requested for the Operations and Research Program will permit NHTSA to respond to critical national traffic safety problems and requirements. The program for FY 1995 includes the following initiatives:

- Completion of final rulemaking actions mandated by the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), including air bags in passenger vehicles, side impact protection on light trucks and vans, and antilock braking systems on large trucks.
- Progress toward achievement of the Secretary's goals to

reduce alcohol-related traffic deaths to 43 percent of total fatalities and increase safety belt usage to 75 percent by 1997.

- A major program of technical assistance to improve State and local highway safety efforts for driver impairment, occupant protection, traffic speed enforcement, emergency medical services, older and young driver safety, measures to deter high-risk driver behavior, increased safety for motorcyclists, pedestrians and bicyclists, and improved traffic records systems.
- Program evaluations of vehicle standard effectiveness, strategic planning to guide future agency programs, and studies to better understand the impact of crash injuries on normal human functions, as well as their effect on the nation's economy and health care costs.
- Expanded research in Intelligent Vehicle-Highway Systems. NHTSA will focus on improvements in vehicle crash avoidance and safety evaluation of mobility enhancements. The agency will work closely with industry to demonstrate promising system designs.
- Management of major crash information collection and analysis systems, including the Fatal Accident Reporting System (FARS) and the National Accident Sampling System (NASS). These systems are crucial to Federal, State and private sector efforts to improve

traffic safety in the U.S.

- New Car Assessment Program (NCAP) testing of frontal crashworthiness and side impact protection, with the goal of providing consumers with better safety information to help make vehicle purchase decisions.
- Work on rollover protection, child safety in side impacts, upgraded frontal crash protection, and safety of electric and alternatively-fueled vehicles.
- Vehicle enforcement compliance tests to ensure that the motoring public receives improved safety benefits offered by new performance standards for frontal crash and side impact protection, as well as in other areas.
- An active defects investigation program to ensure that unsafe vehicles are identified, recalled and corrected. This will entail processing more defect complaints, conducting more vigorous investigations, and operating the Auto Safety Hotline to satisfy public demands for safety information (and in turn receive more information on potential vehicle defects as the primary support to the agency's defect investigation activity).
- Continue crashworthiness research to improve frontal, side and rollover crash protection, and to continue major biomechanics studies of injury mechanisms and test device development that will support NHTSA's vehicle safety rulemaking actions.
- Development of a world-class National Advanced Driving

Simulator (NADS) at the University of Iowa to improve driver and vehicle crash avoidance capabilities.

The $151.4 million in funding requested for highway traffic safety grants will support state and community efforts to create and implement innovative and effective highway safety programs. The grant programs are tailored to the safety and program needs of each state, in order to reduce deaths and injuries on our highways nationwide. NHTSA's grant programs consist of the following:

- Section 402 State and Community Grants - $123 million. This grant program provides Federal leadership, encouragement and technical assistance to all states in their efforts to develop and implement the most effective highway safety programs to address national safety priorities established by Congress.
- Section 410 Alcohol-Impaired Driving Countermeasures Grants - $25 million. Section 410 has been very influential in encouraging states to pass strong legislation to deal with drunk and drugged driving.
- National Driver Register - $3.4 million. All 50 states and the District of Columbia are being provided technical and training assistance to support the conversion of their driver licensing records to the new Problem Driver Pointer System (PDPS). NHTSA expects to have all states operational in PDPS by April 1995.

## Strategic Planning

NHTSA is developing a strategic plan for its future direction that will be completed in the summer of 1994. During 1993, NHTSA conducted a number of outreach and information gathering activities, including development of several issue papers covering areas critical to the future of the agency. These issue papers pertain to traffic safety programs, the motor vehicle industry, data collection, medical services, vehicle characteristics and use, and energy and the environment. Now that this information gathering has been completed, NHTSA is positioned to set its agenda for the next several years.

## A Secretarial Highway Safety Program Initiative

NHTSA requests $22.3 million for the highway safety program in order to carry out the Alcohol, Drug and State Programs; National Occupant Protection Program; Enforcement and Emergency Services; Highway Safety Research; and State Motor Vehicle Services. This is the agency's key program to address various facets of driver behavior, by far the most frequent cause of motor vehicle crashes. The highway safety program focuses on technical assistance to improve strategies for changing human behaviors that lead to crashes, injuries and fatalities.

Two areas, alcohol impairment and failure to use available occupant restraints, account for a major portion of losses each year. Consequently, Secretary Peña established two goals to reach by 1997: reduce the alcohol-related portion of traffic deaths to 43 percent; and increase belt use to 75 percent.

Accomplishing these goals will save an additional 2,900 lives and $5.8 billion in societal costs each year.

NHTSA is working with the highway safety community and the media to develop a campaign to achieve the Secretary's goals. States have taken the lead in campaign planning by setting the alcohol and seat belt goals they hope to achieve by 1997. This campaign, which is slated to begin in the first quarter of FY 1995, is designed to utilize NHTSA's leadership to help national, state, and local highway safety advocates to incorporate three strategic features into their program plans. First, we want to introduce a quarterly schedule for program material dissemination and emphasis, one that would move us toward a more coordinated national traffic safety agenda. Second, we want to make further progress in helping states and communities conduct highly publicized seat belt and impaired driving law enforcement efforts. And third, we want to increase the utilization of combined programs in which multiple programs are pursued simultaneously, such as media campaigns that address the dangers of impaired driving and speeding, and enforcement efforts that focus on seat belt and alcohol violations.

### Alcohol and Drugs

Approximately $8.3 million will be required in FY 1995 to fund two basic strategies to stop drunk and drugged driving: deterrence by means of laws, enforcement, sanctions and publicity; and prevention by means of information and education. These strategies will support the combined alcohol-belt campaign and help achieve the Secretary's goals.

NHTSA's program will assist states in passing major laws, including administrative license revocation, .08 BAC limit for adults, and zero alcohol tolerance for persons under age 21. Passing these laws help States qualify for Section 410 impairment countermeasures incentive grants.

Emphasis on youth alcohol safety will continue, including completion of a graduated licensing demonstration, support for closure of loopholes in State alcohol sale and purchase laws governing minors, and technical assistance to law enforcement officers. We will use our public-private coalition, the Network of Employers for Traffic Safety (NETS) to mount worksite traffic safety programs for youth. The agency will continue implementing recommendations of Traffic Safety Summit II, including training for prosecutors and judges, youth legislation, and work with other Federal agencies on alcohol treatment research and education.

Public information and prevention of impairment will be continued through the Ad Council, Drunk and Drugged Driving (3D) Prevention Month and Techniques for Effective Alcohol Management (TEAM), each a collaboration between public and private sector organizations (a strategy that offers the additional advantage of multiplying the impact of NHTSA resources). Our focus includes intervention with high school and college youth, and other high-risk populations.

Institutionalization and regionalization of Drug Evaluation and Classification (DEC) will be completed in FY 1995. Technical support will be offered to states in their final year of effort to reach self-sufficiency, and training for prosecutors and judges in DEC sites will be maintained. A checkpoint demonstration to detect drug and alcohol-impaired drivers will be completed, as will a new research initiative to identify and document legal obstacles to convictions for drug-impaired drivers. Improved training for drug recognition experts will be developed and tested, based on research that validates and streamlines DEC procedures. Finally, a screening instrument for determining whether drug-impaired drivers should be referred to treatment will be pilot tested and evaluated during FY 1995.

### Occupant Crash Protection

The national occupant protection program is proposed at $5.7 million in FY 1995. Funds will be used primarily to provide materials to support state efforts to conduct periodic, visible law enforcement, to increase public awareness of the benefits of safety belt and child seat use, and to support upgrading occupant protection laws. These activities constitute a significant portion of the combined alcohol-belt program.

Significant progress has already occurred. Every state, the District of Columbia and Puerto Rico have enacted child passenger safety laws, and 47 states, D.C. and Puerto Rico have safety belt use laws. Vigorous enforcement by the States has increased belt usage from under 15 percent in 1983 to 66 percent in 1993, and child restraint use has increased similarly.

Programs for FY 1995 will employ education, public information, enforcement training, and outreach to improve restraint law compliance and law enforcement, and also to target high-risk groups with low usage levels. Whenever possible, we plan to promote the combined focus on reducing alcohol fatalities and increased use of occupant protection. The agency intends to develop programs to inform the public on the correct use of child seats, particularly in combination with front seat airbags.

### Speed Enforcement

The budget proposes $1.2 million for technical assistance to State and local speed enforcement programs. Emphasis is in several areas, including advanced enforcement technologies, public information, and demonstration of new approaches in speed control. Speed enforcement receives program emphasis because one-third of the traffic deaths in 1992 was attributed to speed-related factors. Motor vehicle crashes of all types involving speed-related factors cost society an estimated $19 billion each year.

Research on speed problems will consist of in-depth crash investigations to determine the degree to which speed contributes to crash causation, and the circumstances under which the risk of a crash is increased due to speeding. New strategies utilizing laser speed measuring devices will be continued, and research will employ a national driver survey to assess perceptions and attitudes about speed. The results of this survey will be used to strengthen speed enforcement programs.

Emergency Medical Services

The agency is requesting $769 thousand for the Emergency Medical Services (EMS) program. This program helps to reduce the level of crash fatalities and injuries, and consequently reduces health care costs. NHTSA's effort represents the major Federal technical assistance program to help states develop and enhance comprehensive EMS systems, including trauma care. Trauma systems can reduce preventable mortality by 20-30 percent and return over 95 percent of patients with traumatic injuries to normal, productive lives. NHTSA will continue to provide states with technical assistance based on findings from our statewide EMS program assessments. Assistance will focus on prehospital data collection to link statewide data bases for evaluations, and on communications planning as well as public information and education. Special emphasis will be given to improving EMS delivery in rural areas, including to Native American populations. As the recognized leader in developing emergency medical technician training curricula, NHTSA will continue to update its national EMS training materials.

Motorcycle Safety

To conduct a program that addresses proper operator licensing, helmet use, and methods to reduce rider alcohol and drug involvement, $345 thousand is requested. These are crucial problems that cause motorcycle travel to be the most hazardous form of highway transportation. NHTSA will implement a national campaign on rider impairment, and continue work on improperly licensed motorcyclists. We will support state efforts to enact helmet laws, and emphasize activities to terminate use of helmets that fail to comply with the Federal safety standard. Various members of the highway safety community will be consulted, including motorcycle safety organizations, motor vehicle agencies, and motorcycle manufacturers and dealers.

### Pedestrian and Bicycle Safety

NHTSA requests $594 thousand for programs to address pedestrian and bicycle crashes, which kill nearly 7,000 persons each year. The FY 1995 program includes the joint NHTSA-FHWA Walk Alert Program, which describes programs in a comprehensive guide intended to assist communities in designing projects to reduce pedestrian crashes. This guide will provide additional technical assistance to help States address older pedestrian problems. A new initiative will focus on alcohol-impaired pedestrians, an especially serious problem given that over one-third of pedestrians who are killed have a .10 BAC or higher.

### Younger and Older Drivers

Younger and older driver safety is of special concern to NHTSA, and we will continue to implement the research agenda transmitted to Congress in 1993. The agency is proposing a total of $739 thousand to conduct younger and older driver research. A two-year study will be concluded in FY 1995 that explores what researchers in other health fields have learned about risk-taking behaviors of young people, and considers how to apply this knowledge in the area of traffic safety. The agency will continue to develop methods to increase belt use by young people. And we recently completed a driver education agenda and action plan that address novice driver education. These projects help provide the foundation for developing a driver-education program described in our report to Congress.

The agency's FY 1995 older driver program will conclude its study of the consequences of losing driving privileges, and the role and use of alternative forms of transportation. Studies will identify obstacles for physicians, family members and friends when notifying driver licensing agencies about older drivers who have experienced problems. The FY 1995 program also will implement earlier research results to develop procedures for older drivers to negotiate intersections safely, with the objective of permitting older drivers to perform safely in more difficult driving situations.

## Traffic Records

NHTSA requests $1.3 million to support the ISTEA requirement that states establish Safety Management Systems, and to assist states in improving their traffic records systems. In conjunction with FHWA, we will be providing grants and assistance to states on information collection.

## Vehicle Safety Rulemaking

Rulemaking develops and issues Federal motor vehicle safety standards and consumer information requirements in order to improve the safety performance of motor vehicles and vehicle safety-related equipment.

The FY 1995 budget proposal of $3.7 million for the rulemaking program will provide funding for Vehicle Safety Standards, the New Car Assessment Program (NCAP), the Fuel Economy Program, and several important consumer programs.

A major near-term goal of NHTSA's rulemaking program for the past several years has been completion of rulemaking actions on schedule, as mandated by the Intermodal Surface Transportation Efficiency Act (ISTEA).

In response to ISTEA, the agency published a final rule in September 1993, requiring all passenger vehicles to be equipped with air bags, starting with automobiles in model year 1998. The agency published proposals during 1993 to further improve the protection afforded by child booster seats; to require antilock brake systems on heavy trucks; and to reduce head injuries from interior impacts. An advanced notice of proposed rulemaking was issued to consider the need for additional brake performance standards, including antilock brakes for passenger cars and other light vehicles. The agency also published a rule in 1993 to improve methods for securing wheel chairs on school buses, thereby increasing transportation safety for disabled children.

We have several significant non-ISTEA rulemaking actions in progress, including reinstating stopping distance requirements for heavy trucks and requiring new truck trailers to have rear impact guards.

NHTSA is considering additional rulemaking resulting from current regulatory activities. Included are steps to reduce injuries in rollover crashes, including possible initiation of rulemaking to reduce ejections through windows (using innovative glazing materials) and through doors (by improving door latches and locks), and to upgrade the roof crush standard. Other areas where rulemaking is being considered include further increasing safety from fires that can result in crashes, requiring greater seat back strength, and upgrading the child safety seat standard by utilizing additional test dummies to evaluate protection of children of different ages and sizes. NHTSA also is taking a comprehensive look at safety issues related to the disabled, and has undertaken a rulemaking process to specify requirements for wheelchair lifts on buses and vans.

As a result of increased use of alternatively-fueled vehicles, we are determining whether these vehicles perform safely on the road and in crashes. Public comment on safety issues is being solicited through published proposals addressing compressed natural gas and electric vehicles, and NHTSA will gather information on the crash experience of selected alternative fuel fleet operators in order to define areas for possible rulemaking actions. Final rules on compressed natural gas vehicle performance and fuel tank performance are expected in FY 1994.

### New Car Assessment Program (NCAP)

A proposed $2.5 million NCAP program will support tests of the frontal crashworthiness of 38 vehicles and expand NCAP testing to include side impact crashworthiness testing of 14

MY 1995 automobiles. More than 450 vehicles have been tested for frontal crashworthiness since NCAP's inception in 1979, and test results have been provided to consumers through the media and NHTSA's Auto Safety Hotline.

Improvements are being made to the NCAP results, in order to make them more useful to the public for vehicle purchase decisions, as Congress directed. A series of reports to Congress since 1992 explains how the agency is implementing improvements, and issues addressed in these reports include data presentation, NCAP promotion and predictions of real-world crash results. In response to Congressional concerns, the agency intends to use the Hybrid III dummy exclusively in testing MY 1994 vehicles for all seating positions protected by air bags, and to adopt Hybrid III as the agency's exclusive test device for NCAP starting with MY 1996 vehicles.

Fuel Economy

The National Academy of Sciences concluded in its study of the potential for improving fuel economy that the Federal government lacks needed information on technology to improve fuel economy, including developments in the automotive industry. In response to that, we are requesting $785 thousand to develop the following information for enhancing NHTSA's decision-making capability on the future of the corporate average fuel economy (CAFE) program: production and financial information on manufacturer plants and product lines; and information from studies on the most promising technologies to improve fuel economy during the next 5-10 years.

Vehicle Safety Enforcement

To adequately fund the Vehicle Safety Compliance and Defects Investigation programs, NHTSA requests $8.4 million. These programs ensure that motorists enjoy the safety benefits of Federal vehicle standards, and that vehicles and equipment, such as child seats, with safety defects are identified, recalled and corrected. This objective is accomplished by testing vehicles and equipment against performance requirements in the standards and investigating potential safety defects.

Almost 11 million vehicles were recalled in 1993 for safety defects and noncompliance (the highest number of vehicles ever recalled in response to NHTSA investigations). The foundation for NHTSA's defect investigations program is motorist information received through the agency's Auto Safety Hotline. In 1993, 76 percent of the defect investigations were based on Hotline calls, and projects will be initiated in FY 1994 to further increase consumer awareness of the Hotline.

During FY 1995, NHTSA plans to test passenger cars for compliance with the new dynamic test requirements of Federal Standard No. 214, side impact protection, which became effective in September 1993 for 10 percent of the passenger car fleet, and will be phased in over the next several model years. This standard provides significant improvements in occupant safety in side impact crashes. Testing will continue for the dynamic frontal crash protection requirements of Federal Standard No.

208, occupant crash protection, and for rear and side fuel system crash testing requirements of Standard 301, fuel system integrity. The agency will continue to test all child seats and motorcycle helmets on the market to ensure that these products are providing effective crash protection.

### Research and Analysis Program

The budget request includes $36.7 million for Research and Analysis in FY 1995 to advance scientific understanding of crash injuries, acquire and analyze crash and injury data, study improvement of vehicle structural designs, and develop new safety technology.

### Vehicle Safety Systems

The agency requests $6.1 million for vehicle and component development that will permit the agency to continue progress toward establishing a technical basis for advancing crashworthiness & formulating vehicle crashworthiness policies and regulations. The budget request also supports development of occupant protection technologies. Frontal, side, and rollover crashes still account for most of the deaths and injuries to occupants of passenger vehicles. In addition to occupant impacts with vehicle interior surfaces during crashes and ejections through door and window areas, pedestrian impacts contribute significantly to death and injury. Improvements in vehicle structure and occupant compartment design, combined with improvements in restraint systems, will require biomechanics of injury measurement, research in test procedures, and countermeasure development and evaluation.

While continuing much of the FY 1994 research devoted to the agency's priorities, the FY 1995 program will continue the development of occupant protection systems beyond the safety capabilities of restraints in current use.

As a result of the benefits of air bags and improved side impact protection in new vehicles, more people who might otherwise die in a crash are surviving. Research is planned to further improve vehicle safety in order to minimize both medical and disability costs of people in offset and car-to-car crashes not currently covered by crashworthiness standards.

### Biomechanics

The funding request for Biomechanics totals $4.5 million, for the purpose of continuing research and development on crash injury, one of the cornerstones of NHTSA's safety initiatives and regulations. To improve safety performance of vehicles in crashes, the agency must gain a better scientific understanding of injury mechanisms in crashes and human injury tolerance levels.

Biomechanics research will continue efforts in four areas: hospital-based crash and outcome studies to relate crash factors to injuries; mechanisms of injury in vital body areas, such as head, neck, torso, arms and legs; mathematical work to model human reaction in crashes and predict both extent and severity of injury; and design of new dummy components to accurately simulate humans in crashes and improve prediction of the extent and severity of resulting injuries.

National Advanced Driving Simulator (NADS)

The NADS program is proposed at $2 million for FY 1995 to support fabrication, testing and validation of the simulator. The simulator will be an important tool for furthering NHTSA's understanding of human factors in traffic safety and for supporting development of IVHS. In January 1994, NHTSA awarded two contracts for the Phase I competitive design of NADS, and following this 13-month period of design competition, the agency plans to select a single contractor to proceed with building, testing and installing the simulator at the University of Iowa.

The NADS program will help maintain the U.S. simulation industry's technological leadership in the world and support the Secretary's goal of advancing U.S. transportation technology and expertise. When operational, it will be the world's most advanced driving simulator.

Intelligent Vehicle Highway Systems (IVHS)

NHTSA's FY 1995 budget proposal for IVHS is $7.3 million, in order to continue the agency's program to foster the development and early deployment of cost-effective, driver-friendly collision avoidance products. IVHS will establish safety goals for crash avoidance technology, develop performance guidelines for crash avoidance systems and evaluate their performance, and work with industry to demonstrate and market the most promising applications. NHTSA's IVHS program encompasses five major elements:

- Development and utilization of research tools (such as instrumented vehicles and the NADS Simulator) to acquire data to improve our understanding of driver and vehicle performance.
- NHTSA collision databases used to quantify crash problems to ensure that countermeasure performance is implemented to match real-world safety needs.
- Assessment of collision avoidance systems, in order to develop guidelines for performance.
- In-service field evaluation (cooperatively with industry) of safety impact, reliability, maintainability, failure and cost of systems.
- Safety evaluations of DOT mobility enhancement technologies, to ensure that innovations do not compromise driver capability and overall safety as these technologies are introduced into motor vehicle safety. The agency's support to the DOT Automated Highway Systems program is an example.

A principal component of NHTSA's IVHS program is development of information on human factors performance for the purpose of matching technology to the capability of drivers.

The FHWA budget requests $10 million to transfer to NHTSA's IVHS effort, in order to support NHTSA activities that are crucial to the success of FHWA projects and the automated highway system project.

National Center for Statistics and Analysis (NCSA)

The Center's request of $16.3 million is necessary to manage its highway and vehicle safety information systems. The data systems are essential to safety problem identification, program development and effectiveness evaluation. These systems are the primary source of information on motor vehicle and highway safety for other DOT agencies, especially FHWA, and are crucial for vehicle manufacturers, the insurance industry, state and local government, and the general public.

Agency databases have to be updated and upgraded constantly in order to keep up with changing safety needs. For example, new information is being collected by the Fatal Accident Reporting System (FARS) and the National Accident Sampling System (NASS) to support increased attention to crash avoidance, especially as part of the IVHS program. NHTSA is improving the cost effectiveness of data systems, including a reconfiguration of the NASS vehicle crashworthiness system to facilitate more efficient collection of crash data. Upgrades in data systems will include information collected on pedestrian crashes and speed-related crashes, for the purpose of supporting increased agency work on these issues. Initial results of the Crash Outcome Data Evaluation System (CODES) program authorized by ISTEA have been promising. A successful linkage of crash records and traffic records with data on emergency medical response and hospital treatment is vitally important to highway safety.

Highway Traffic Safety Grants

NHTSA requests $151.4 million in FY 1995 to provide grants to help States and communities strengthen and make their highway safety laws and programs more effective and efficient. This includes a request of $123 million for the Section 402 State and Community Highway Safety Grant Program. In FY 1995, the Section 402 program will be a major influence nationwide in meeting by 1997 the Secretary's goals to increase belt use and reduce the proportion of alcohol-related crash deaths, and to continue reducing the traffic fatality rate. These goals can be achieved through effective State laws and their enforcement, and public information and education. The 402 Program ensures that all States have resources to address key highway safety problems that occur, and that these problems are attacked with the most effective countermeasures available nationwide, as developed and tested in the Federal Section 403 Program. NHTSA will continue to recognize and document outstanding State highway safety accomplishments using Section 402 grants through the Administrator's Highway Safety Programs of Excellence awards. The agency also will strengthen technical assistance to States by producing a new "Traffic Safety Digest" of important projects supported by Section 402 grants.

Funding for the Section 410 Alcohol-Impaired Driving Countermeasures Grant program is requested at the fully authorized level of $25 million. Twenty-three states and the District of Columbia received Section 410 grants in FY 1993, and approximately 30 states are expected to qualify in FY 1994. The agency expects approximately 32 states to be eligible for Section 410 grants in FY 1995.

Through the highway safety grant programs, Federal efforts and resources to reduce deaths and injuries on our highways are multiplied. The influence of national guidance and Federal grants provided through the Section 402 program, plus the incentive grant programs, have produced a significant leveraging effect within State highway safety programs. Public and private sectors unite to participate in the highway safety arena. The cost-benefit ratio of NHTSA's programs to date clearly indicates that additional dollars in this program will be multiplied many times in terms of the benefits realized. These programs are major tools in the effort to reduce health care cost and increase highway safety.

## National Driver Register

The FY 1995 request includes $3.4 million for the National Driver Register, to assist all states and the District of Columbia in converting their driver license systems to the new Problem Driver Pointer System (PDPS). Eight states are currently testing PDPS, and we expect all states to be fully operational in PDPS by April 30, 1995. The FY 1995 program also will include a joint effort with FHWA and the American Association of Motor Vehicle Administrators (AAMVA) to determine how new information technology can be incorporated to provide seamless service to Federal, State and private users of the NDR.

Mr. Chairman, that concludes my statement. We will be pleased to answer your questions.

US Department
of Transportation

**National Highway
Traffic Safety
Administration**

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## BIOGRAPHY

## CHRISTOPHER A. HART

Christopher A. Hart has served as Acting Administrator of the National Highway Traffic Safety Administration (NHTSA) since his appointment by President Clinton as the Deputy Administrator in February, 1994.

Established by the Highway Safety Act of 1970, NHTSA is responsible for reducing deaths, injuries and economic losses resulting from motor vehicle crashes. This is accomplished by setting and enforcing safety performance standards for motor vehicles and items of motor vehicle equipment, and through grants to state and local government to enable them to conduct effective local highway safety programs.

Before joining the NHTSA, Mr. Hart served as a Member of the National Transportation Safety Board (NTSB) from 1990 to 1993, and as Deputy Assistant General Counsel to the Department of Transportation from 1977 to 1979. He was the managing partner of the Washington, D.C. general civil practice law firm of Hart & Chavers. He was also an attorney with the Air Transport Association.

Mr. Hart is a member of the District of Columbia Bar. He is also a member of the Lawyer-Pilots Bar Association and has been listed in "Who's Who in American Law".

A pilot with multi-engine and instrument ratings, Mr. Hart was listed in "Who's Who in Aviation". He was the recipient of the Howard Hughes Fellowship for research in helicopters at Princeton University.

Mr. Hart graduated magna cum laude from Princeton University where he was elected to Phi Beta Kappa, Sigma Xi, and Tau Beta Pi for engineering. He earned a Juris Doctor degree at Harvard Law School.

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## TRAFFIC DEATHS INCREASE

Mr. CARR. Thank you, Mr. Hart.

Before starting the questions, do you have any comments you want to make, Ms. Stoll?

Ms. STOLL. No, thank you.

Mr. CARR. Mr. Wolf, do you have an opening statement you want to make?

Mr. WOLF. No, thank you.

Mr. CARR. Let's talk a bit about the overall statistic of the number of traffic deaths. It is one that bothers me, not from the standpoint necessarily of the tragic individual impacts, but from the standpoint that we all seem to try to drive to a bottom line. In doing so, we sort of sift and distill. Sometimes we get to the bottom line number, the absolute number, and traffic deaths have gone up.

What I would like to have you do, if you would, is pull back from that bottom line and help us understand that number. At some point, it is measured against the number of vehicle miles traveled. This winter we learned that, just as in aviation, if you have a really harsh winter with a lot of freeze, thaw, sleet, freezing rain, more accidents occur, and maybe some related fatalities.

I don't know to what extent you compute weather into these formulas. I am just trying to ask you how alarmed should we be in relative terms that we have had a slight uptick in the absolute number of traffic fatalities.

Does it suggest that somehow or other some finely knit thing we have tried to put together is starting to unravel or, like so many statistical indicators, this one is fairly easily explained away and maybe next year we can expect things to be on the right track?

Can you expand on that for us?

Mr. HART. I would be happy to, Mr. Chairman.

We are obviously not pleased that the number moved up either. The increase in fatalities was about 1.6 percent over 1992. However, we also noted an increase of 2.2 percent in vehicle miles traveled, and that is why the rate went down, because the vehicle miles traveled increased at a greater rate than the number of fatalities.

So that is why I indicated that the rate, the fatality rate for vehicle miles traveled was on a continuing decline. Obviously, we are pleased with that, but we are nonetheless not pleased that the total number went up and we would like to see the numbers go down yet further. That is what we are all about, to try to do that in every way we can.

Mr. Bischoff may want to add to that.

Mr. BISCHOFF. I think it is a very complex relationship between fatalities driven by a number of factors, but I think there are three principal factors: The state of the economy, the level of safety, which can be safety of roads, the safety of vehicles, and the safety of our drivers, and demographics.

Currently, demographics are pushing us to higher fatalities. We have more roads, more drivers and more vehicle miles of travel. But the level of safety has been constantly improving so that the number of fatalities goes through a downward cycle and, fortunately, each high has been lower than the preceding high, so we are, our overall assessment of the trend is that the level of safety is overpowering demographics.

What is happening is the economy improved this past year, and we have seen every time the economy improves, fatalities go up. And what happens is people start driving more and they start driving particularly at times that are more dangerous, like evenings and weekends. So looking at the fatality chart, I guess we would have expected that fatalities would have turned up because of the turnup in the economy.

But what we are pleased about is what Mr. Hart has said, that we are still enjoying an overall downward trend in the fatality rate that has been going down now for 30 years and I think that is what is most important.

### ECONOMY'S EFFECT ON SAFETY

Mr. CARR. You mentioned the economy. Of course in Michigan, we are very sensitive to the impact of the national economy on our State's economy and employment. One of the mitigating factors ought to be that as the economy improves, incomes improve.

I heard the President yesterday at the Fox Theater in Detroit complain that while we are creating new jobs, we are not raising income levels very dramatically. Income growth has been fairly stagnant. While we are creating lots of new jobs—over a million new jobs in the last 13, 14 months—we still have seen an 8.3 percent reduction in manufacturing jobs.

The question is to what extent are we turning over the fleet of automobiles that we have? Obviously, the automobile that is manufactured today is safer than the one that someone might be driving that is 10 years old. Is there anything in the statistics on fatalities that tells us that there has been a slowdown in the turnover of automobiles so that people are hanging on to older cars and that these older cars are more involved in accidents than the newer cars?

Mr. HART. I will have to defer to Mr. Bischoff. I am not familiar with whether our statistics are detailed enough to go into age of autos and whether, for example, we have looked at whether the increase in lease financing has increased the turnover even in times of a difficult economy. I am not sure our statistics are that finely honed.

Mr. Bischoff or maybe Mr. Parker.

Mr. PARKER. Yes. I would like to address a couple of the factors you raised. The level of economic activity, the harsher winters, the turnover of the fleet, all those I think are hypotheses of what might be influencing the total number of fatalities.

The agency started a couple of years ago modeling efforts to look at all those factors so you can account for them and get an understanding of what the effects are on the overall fatality numbers. That work is not completed yet. We plan to continue it and, hopefully, before we are too far in the distant future, we can answer these questions better for you.

I think all those are somewhat important factors. Harsh winters, though, seem to go the other way. You may have more accidents—you probably have less driving but more accidents per driving, but fatalities may go down in a situation like that because you do not have the high speed driving, et cetera. As I say, we are engaged in analytical efforts to try to understand all the components that go into that fatality number.

## NATIONAL ACCIDENT DATABASE

Mr. CARR. One of the things this Committee has been about in the last year is trying to get our arms around some solid research so that we can base investment decisions on economics rather than politics. We have asked the Federal Highway Administration to speed its work with the HPMS system, whereby segments of the national highway system are mapped into a database that is manipulated to determine the condition of roads and where we ought to put our infrastructure investment.

I was wondering if we should not also begin a program where there is some detailed accident reporting that is of a common format such that we can build a national database which would include make, model, age, overall maintenance level, weather, and a number of items you folks could think about that I could not, so that we could be dealing from a real empirical database that can be useful.

Mr. PARKER. I think, Mr. Chairman, that would be useful and we have been working on that for several years. One is the critical automated data reporting elements that we have talked about, I think, a couple of years here. The difficulty with that is that you are dealing with the States in kind of a voluntary program.

We pay for some data collection activities—FARS and NASS, for example. We do collect I believe from 26 States their accident files, and I think we have seen over the years an improvement in what they are reporting. And we have these major activities to promote cadre, so that the States have what we think are the core, critical accident reporting elements, which would include weather, and make, model of vehicle, et cetera. And I think you are going to see improvements in that regard in the future.

The hangup, as I said earlier, is we do not pay for that so it is a kind of jawboning and arm twisting, but the main component of that is to convince the States that the data is very useful for them in designing their own highway safety programs. So we have also embarked upon a program to help the States with analysis of their data to convince them this data is important to them.

I think those things together, a sort of arm twisting plus convincing the States that the data is important to identifying their problems and priorities will eventually get us to the point that the state data will be in very, very good shape.

Ms. DERBY. May I add a bit to that?

This year we had an initiative to work with the States to have them plan for how they could improve their data collection activities, and we intend to fund, up to 25 States in small grants. We are working with FHWA on this effort to help States adopt CADRE and to see what has to be done to accomplish that. There is some national governor elements that motor carriers want, and working with the States, hope to advance the state-of-the-art there so that the data will be available to everybody.

Mr. HART. I would add in a very generic fashion that to the extent health care is receiving a lot more prominence and attention, we are in the business of prevention of fatalities and injuries, and that gives us a prominent role in the whole health care arena. That environment I think will help us do a lot of the programs that we are trying to do better, such as enhancing the completeness of the States' databases that we get.

### AUTOMATED CRASH DATA COLLECTION

Mr. CARR. Well, it probably is not the charter of your agency, but perhaps the Secretary could take an initiative here. Last year we had a very interesting discussion stimulated by my good friend and colleague, a member of this Committee, Mr. Price, and some developments that they were trying to advance in the state of North Carolina that would equip the state police with certain devices that would locate traffic accidents more precisely, even using GPS technology, et cetera.

I can't help but being impressed by what small package delivery has become in this country. Now, why did I suddenly go off on that tangent? I see people from UPS and Federal Express—and I am probably omitting a few other good package deliveries for the record, but this is not an endorsement. Every truck is equipped with an electronic clipboard that has software loaded into it. When they make their rounds they are using electronic pen-type devices to make checkmarks and write things with a signature recognition, like an Apple Newton or something like that. Of course, all this information gets transmitted through satellites back to a central place where it is all collected and sifted into some meaningful data exchange.

It would seem to me that one thing we could do on the information highway is to have a program out of the DOT which would seek as its goal that every squad car in America—police, state, county—would have an electronic clipboard where when the matter turned to highway safety—a fatality, an accident, or something like that—there would be a form through which the data could be transmitted. Perhaps, two-thirds of the format would be determined by the federal government, and one-third determined by local units of government so that they have flexibility to make additions or changes that are meaningful to them.

The federal government could, with a matching program, supply the money to equip these squad cars and, through modern data communications, you could determine how many accidents occurred in America on a daily basis. Was there something that was weather correlated?

Perhaps you find out that a number of accidents occurred last week somewhere in America with a suspicious commonality to a particular make, model, or vintage of automobile. This information would alert people to something that was occurring with a particular vehicle that we should look at, a kind of an early warning system.

In any event, it seems to me that you could think of dozens and dozens and dozens of uses for the entire Department. FHWA could make use of this. We all think we know where the safety problems are, but I think it is probably months if not years before we can accurately correlate accident data with physical locations on highways where there may be design problem.

It would be expensive. The cost would have to be shared. But it seems to me if small package delivery companies in America can figure out a way to have this technology seep into every nook and cranny of American society, why shouldn't law enforcement, accident investigators and all the like have this technology? Couldn't we get the Secretary interested in a new initiative that would help us all out?

And it seems to me that the NTSB and NHTSA would be among the many users. There would be other users. I don't think the burden ought to be on NHTSA to push forward on this. I think such an activity is much broader than that.

Mr. HART. I think those are very interesting, and I am going to ask Mike Brownlee to go into more detail to indicate some of the things we are doing, but I will note we are also interested in better data links with various sectors over society. We do not get data into our systems enough from the hospitals so we can correlate injuries with make, model of cars, for example.

So there are a lot of things we can do by getting information from once a person goes into the hospital door our information flow essentially stops. And there are a lot of things we can do to improve what we do by getting more of that information and a lot of that we could obtain on a quicker basis too, but I will ask Mr. Brownlee to amplify.

Mr. BROWNLEE. The entire area of traffic records and its effect on auto safety, both from a national and state perspective, is very high on our list of priorities for the future. Several projects are going on that bear directly on the observation you made about technology, one of which is use of electronic clipboards. There are a number of options that are currently in the field that are being used by police to record data and download it into a computer system at the end of the day.

We are working to evaluate this type of technology to determine potential applications and associated costs and benefits for police agencies. Another technological innovation, Global Positioning Systems are used in a number of ways, not only to locate accidents on the highway for problem I.D. purposes but there are also potential applications for pin pointing accident locations for EMS response and police response and those sorts of things as well as intelligent vehicle applications that my colleague, George Parker, has some interest in.

One of the principal keys we find in data in the States is the ability to get usable, accessible, and manageable data through computerized systems in a timely fashion. And while technological advances can help that to a large degree, one of the principal issues is: How do you get that today in a central place usable by all parties?

Mr. PARKER. Electronic clipboards can be helpful to that because you can do an end-of-the-day readout and develop the database as you go along. The States are usually a year or two behind in their databases, so when we are trying to look at current model issues, the databases from the States are usually a couple of years old and are not all that useful for that.

I will mention one other program—CODES—which is the Crash Outcome Data Evaluation System. And that was initiated based on

$5 million we got from Congress as part of ISTEA. That is a project to link police accident reports, EMS reports, and hospital reports, electronic databases, based on those. And there are seven States that have grants from us to do that.

And I think there has developed within both the accident community, within the States, and within the health community a real ground swell of interest and we hope that we can promote that into other States too.

### NISSAN MINIVAN RECALL

Mr. CARR. Well, I could talk about all that stuff forever, but I don't want to use all the time. Mr. Wolf, do you have any questions?

Mr. WOLF. Thank you, Mr. Chairman. Welcome to the Committee, and just for the record, let me just stipulate again my concern that the Assistant Secretary is here. We will resolve that issue at another time, but I reiterate my concern about your attendance at these hearings.

I have a lot of questions and I will try to move through them fairly quickly and maybe some can be answered briefly with more information for the record.

Last year when NHTSA testified, I asked the question about Nissan Motor Corporation. The company has annouced a buy-back of all 33,000 of the C–22 minivans sold in the U.S. NHTSA was petitioned last year to order the buy-back but denied the petition after Nissan agreed to conduct the fourth recall.

How do you answer the critics that say the buy-back is too little, too late, and that you should have forced the company's hand long ago?

Mr. HART. I am going to provide a general statement and then let Mr. Boehly fill in the details because most of that predates me.

We, as an agency, are very interested in vigorously enforcing our compliance standards and are vigorously enforcing defects, so we obviously looked at that closely. That buy-back was basically unprecedented in the Agency's history. That is not to say that is why we were reluctant to do it.

The reason we did what we did is that it appeared each time that the remedy that was proposed would be adequate and, basically, we are trying to do what we can to protect the public safety with adequate remedies. That is what in a generic sense that occurred in that case. But I will ask Mr. Boehly to fill in the details.

Mr. BOEHLY. Mr. Wolf, you may recall last year when we chatted about the Nissan van matter we indicated that we had been petitioned by an outside organization to pursue the buy-back. We denied that petition and instead went with the fourth recall from Nissan. The question is: Why did we do that?

Our principal concern is for the safety of the American public. The isssue here is to make sure that, if there is any problem, it gets remedied quickly and expeditiously. A buy-back can take some time. People may opt out of a buy-back. Our concern was to make sure that vehicles were repaired. There was some concern, obviously, because it would be the fourth recall and concern that Nissan was going to do a comprehensive and thorough job.

We met with them, looked at the recall they were proposing at that time. We looked at test data on the remedy and we were convinced it would address the under-hood fire problem associated with excessive engine overheating. And, therefore, because our principal goal again was to protect the safety of the public, we allowed Nissan to proceed with the fourth recall and denied the petition to go along with a buy-back.

Subsequent to that, we continued to monitor the process of that recall. We initiated a program, in which we sent out letters to all owners, about 33,000 owners of those Nissan vans, to ask them the experience they were having; were there any fires that were occurring, were there any problems they were having subsequent to the recall. We inspected some of those cars in the real world to see how the recall work had been done.

Along about December, we started getting some reports there were fires not associated with the remedy, but the way the remedy or recall work had been instituted by the dealerships into the vehicles themselves. We again met with Nissan, made it clear to them we would not allow a fifth recall but something had to be done to address this problem.

They came in and proposed a buy-back option for owners should they choose to accept it, leaving that open for 120 days, and if people chose to opt out of the buy-back, they could then get additional inspection work of the vehicle done to make sure the recall work had been done properly. So consumers will have an option now. They can bring the vehicle in, get some cash for it-retail value for the vehicle-or they can have it yet again looked at to make sure the recall work was done properly.

An important issue we looked at was the value of the van. For example, the value of those vans over what would have been expected, or what would have been expected, if it had not had this problem. And we looked at peer vehicles, Mitsubishi and Toyota vans, to look at what the manufacturer suggested retail price of those vehicles had been in comparison to the Nissan van, and we found the Nissan van value was within the range, and sometimes greater than the range of the peer vehicles.

So there was no data to suggest that the buy-back allowance—that is the retail value that Nissan was proposing—was lower than what would be expected for the vehicle at that time.

So, as the case stands right now, Nissan will offer this buy-back to interested parties. They can opt into it and have their vehicle bought or they can bring it in for an inspection to make sure all the fourth recall work was done properly. We continue to believe the fourth recall work will address the problem and it will solve the under-the-hood fire problem. But there are concerns about the way the dealers perform this work, and Nissan has a comprehensive program to ensure that will take place.

### FORMER NHTSA-DOT ATTORNEYS

Mr. WOLF. In the testimony last year, it was revealed that Nissan's legal counsel was the former chief counsel of NHTSA, and she departed, I understand, in 1989.

Mr. BOEHLY. I think that is correct.

Mr. WOLF. I have been concerned about people who leave Congress and leave the Administration and go out to represent these companies, particularly foreign companies. And I had asked NHTSA to provide for the record a history of any lawyers representing Japanese car manufacturers who were formerly with DOT. We have received nothing from NHTSA on that. It was on page—I don't have the exact page here, but in the record I will be glad to show it to you.

It was on page 140 that we asked NHTSA for that.

Mr. HART. We would be happy to provide that information.

[The information follows:]

NHTSA knows of three former employees in the agency's Office of Chief Counsel who, after termininating their employment at NHTSA, have subsequently represented Japanese motor vehicle manufacturers: Paul Jackson Rice, former Chief Counsel (1990-1993); Erika Z. Jones, former Chief Counsel (1985-1989); and Roger Fairchild, former rulemaking staff attorney.

## HIGH RISK DRIVERS ACT

Mr. WOLF. On the High Risk Drivers Act, let me, first, give the credit to Senator Danforth. He authored the bill and I was pleased to introduce it in the House. We will hold hearings on next Thursday, the 24th.

In testimony submitted for the record last year, NHTSA indicated it was in the process of developing its views on the legislation which would provide for a new traffic safety incentive grant program.

Can you share with the Committee, since a year has gone by, what your views are with regard to the High Risk Driver's Act which passed the Senate, by voice vote.

Mr. HART. Yes, I believe we submitted a position statement on that. I will ask Mr. Brownlee to provide the detail.

Mr. BROWNLEE. Yes, sir. The fundamental principles of the High Risk Drivers Act, and that is dealing with provisional graduated licensing for young people, the older driver parts of it, the record parts of the High Risk Drivers Act, are all programs we support and have actively been involved in for some time.

The key to the Act is Title I, which is the provisional licensing part of it. The incentive program that is created in order to stimulate these kinds of programs within a state, we have some problems with. And those problems essentially are through the grant system that currently exists within the States for highway safety purposes. There are a lot of opportunities for the States to manage their own programs.

One of our concerns was that the grant program that is authorized there would compete with some of these other demands within the States for highway safety program funding.

There are some other parts of it specifically that we might take issue with, dealing with some of the programs not directly related to provisional licensing in Title I. But, the fundamental problem we have is establishing a new incentive program that might compete with other funding programs that are available to the States.

Mr. WOLF. Have you sent those comments up to the committee?

Mr. BROWNLEE. Yes, those views were submitted to the committee.

Mr. WOLF. To the Public Works Committee?

Mr. BROWNLEE. Yes.

Mr. HART. In a more generic fashion, as we improve seat belt use and as we reduce alcohol-involved fatalities, we are getting more to the harder core of the non-users of belts and of the drinkers, and that has necessitated focusing on certain groups to try to improve the statistics. Two of the groups we are focusing on are two of the groups in that Act, the young and old drivers. So we are very interested in targeting our focus more sharply towards those groups as we get to the more difficult cases.

Mr. WOLF. Just to help me a little bit, then, what is NHTSA's position on the bill? Are you in support of the bill with changes or are you opposed to the bill.

Mr. HART. I think the comments that Mr. Brownlee referred to are that we are in support of the concept of the bill, but we would like to sharpen some of the specifics of it in order to avoid some of the problems he mentioned.

Mr. WOLF. Okay. What about the administrative license revocation. That just passed in the State of Virginia. Some of the groups are asking us to put something in the bill with regard to that. What is your feeling about that?

Mr. HART. Administrative license revocation is something we support strongly as well. That is one of the seven qualifying factors in our Section 410 legislation, and we have testified in States around the country on that concept.

Again, I will ask Mr. Brownlee——

Mr. WOLF. So you would favor putting that in the bill?

Mr. BROWNLEE. Administrative license revocation as a part of a provisional system for dealing with underage drivers would be an absolute must to be included with any form of provisional licensing that might go on within a State. Again, we support provisional licensing.

### UNDERAGE ALCOHOL MODEL LAW

Mr. WOLF. Last year, you testified that a model law of the States to combat underage alcohol sales would include several prohibitions, including prohibitions against the seller and against possession.

NHTSA also promised to develop guidance for a model law and provide distribution to the States. Has that been done?

Mr. BROWNLEE. Yes, it has. We have worked with the Commission on model state laws to develop a model law that would encompass all those features in an underage program.

Mr. WOLF. Could we get a copy?

Mr. BROWNLEE. Certainly.

Mr. WOLF. Was that sent out——

Mr. BROWNLEE. It is sent out through the normal devices for distribution by the Commission. It is made available routinely to all the States, State legislators and others interested in those laws.

[The information follows:]

# Model Underage Alcohol Consumption Reduction Act

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# Model Underage Alcohol Consumption Reduction Act

## Policy Statement

Despite the legal drinking age of 21, vast numbers of youths under the age of 21 consume alcohol. Distressingly, the number of them engaging in abusive alcohol consumption patterns remains high: nearly one-third of high school seniors experience a "binge" of five or more drinks in a row within the previous two weeks. For college students under the age of 21, the numbers approach 50 percent. These drinking patterns can lead to harmful and sometimes deadly consequences. For example, approximately 30 percent of teenage drivers killed in 1991 tested positive for alcohol.

Studies indicate that the later the onset of alcohol consumption, the less likely an individual is to develop problems with alcohol abuse. However, the average age at which young people in this country begin drinking is now 13.

Research also indicates that alcohol can be a "gateway" drug, in some instances leading to tobacco or illicit drug use. By reducing the exposure of children and teens to alcoholic beverages, the Commission intends to reduce the likelihood that those youths will progress through that pattern of increasingly self-destructive behavior.

The Office of the Inspector General of the U.S. Department of Health and Human Services has identified numerous loopholes in state laws pertaining to underage alcohol consumption. These loopholes contribute to the easy access to alcohol and lax attitudes that lead to underage alcohol consumption. While all states have established a minimum legal drinking age of 21, few prohibit all aspects of the purchase, possession, or consumption of alcohol by those under the age of 21. For example, twenty-three states do not prohibit minors from attempting to purchase alcohol. Five states do not have laws to prosecute those who succeed in purchasing alcohol. Sixteen states do not prohibit those under 21 from misrepresenting their age to obtain alcohol. Eighteen states have no laws against the use of fraudulent identification.

This model legislation, developed with the assistance of the National Highway Traffic Safety Administration, establishes a comprehensive prohibition of the purchase, possession, and consumption of alcohol by underage people. It also addresses other important means through which underage drinkers obtain alcohol: older people who provide alcohol to underage drinkers, establishments that knowingly serve underage drinkers, and fraudulent identification use by underage drinkers. The Commission believes that all of these provisions should be included in any comprehensive statute designed to curb underage alcohol abuse.

State laws alone will not prevent or curb underage alcohol abuse. Prevention also must take the form of educational programs, school policy approaches, mass media campaigns, communitywide strategies, alternative programs, and workplace programs. Attitudes and influences must change as well, and those changes can happen. See, for example, the Model State Sensible Advertising and Family Education Act in this volume, addressing alcohol advertising.

Laws express community values and set community standards in strong, unambiguous terms. Laws — an important facet of any comprehensive preventive approach — help to shift attitudes and direct social influences towards socially accepted behaviors. The intent of this model legislation is not only to address a serious problem in the most effective legal manner available, but also to accentuate those community values of health, safety, and the welfare of young people, both now and in the future.

# Highlights of the Model Underage Alcohol Consumption Reduction Act

## ASSUMPTIONS AND REMEDIAL GOALS

- Recognizes the high prevalence of underage drinking.
- Recognizes the harmful consequences of such underage drinking, including above average rates of traffic fatalities, hangovers, injuries, and legal difficulties as well as the potential for future heavy alcohol and other drug use.
- Recognizes that numerous loopholes exist in state legislation pertaining to underage purchase, possession, and consumption of alcohol and the use of fraudulent identification to obtain alcohol.

## SPECIFIC RECOMMENDATIONS

- Prohibits the:
    - Purchase, attempt to purchase, or solicitation of someone to purchase any alcoholic beverage;
    - Consumption of any alcoholic beverage; and
    - Possession of any alcoholic beverage with the intent to consume it.
- Authorizes law enforcement officials to seize and/or destroy alcoholic beverages that are in the possession of underage persons.
- Provides penalties, including fines, community service, and the suspension of driver's license, for those who violate underage drinking provisions of this [Act].
- Provides three options for assessing, referring, and treating underage drinkers to appropriate treatment or education services.
- Prohibits the use of fraudulent identification to obtain, possess, or consume alcoholic beverages and establishes penalties to punish the use of such identification.
- Prohibits the sale or furnishing of alcohol to underage persons and establishes penalties to punish such sale or furnishing.
- Prohibits the sale or furnishing of alcoholic beverages to underage persons by a licensed individual or establishment and establishes penalties, including the revocation of the liquor license, for such illegal sale or furnishing.

# Model Underage Alcohol Consumption Reduction Act

### *Section 1. Short Title.*

The provisions of this [Act] shall be known and may be cited as the "Model Underage Alcohol Consumption Reduction Act."

### *Section 2. Legislative Findings.*

(a) Despite a minimum legal drinking age of 21, recent alcohol and other drug use prevalence surveys such as the annual National High School Senior Survey indicate that nearly one-third of all high school seniors experienced a "binge" of five or more drinks in a row within the previous two weeks.

(b) The average age at which young people begin drinking is 13. By age 13, approximately 30 percent of boys and 22 percent of girls classify themselves as drinkers. According to a 1988 National High School Senior Survey, 17 percent of high school seniors reported having been drunk at least once by eighth grade, 37 percent by ninth grade, 54 percent by tenth grade, and 71 percent by twelfth grade. Studies demonstrate that the use of alcohol by individuals before the age of 15 appears to be one of the predictors of later heavy alcohol and other drug use by the individuals.

c) Parental approval of drinking has been found in a number of studies to be a significant predictor of alcohol consumption by many adolescents, according to an Office of Substance Abuse Prevention Monograph "A Promising Future: Alcohol and Other Drug Problem Prevention Services Improvement."

d) A Southern Illinois University/College of William and Mary survey of 58,000 college students from 78 different colleges and universities found that students under the age of 21 drink more alcohol and suffer more hangovers, injuries, and legal difficulties than those over 21.

e) Forty seven percent of traffic fatalities of people age 15-20 were alcohol related in 1991, according to the National Highway Traffick Safety Administration.

(f) A 1991 Office of the Inspector General report indicates that eight million junior and senior high school students drink alcohol weekly. The same report notes that 6.9 million junior and senior high school students purchase their own alcohol from stores.

(g) The Office of Inspector General has found that numerous loopholes exist in state legislation pertaining to underage purchase, possession, and consumption of alcohol and the use of fraudulent identification.

(h) The National Transportation Safety Board has called upon states to eliminate loopholes in state laws by banning the purchase, attempt to purchase, possession, or consumption of any alcoholic beverage by those under the age of 21.

(i) The Join Together Public Policy Panel on Underage Access to Alcohol recommends the following actions to reduce underage drinking, among other recommendations:

(1) States should lower the Blood Alcohol Concentration (BAC) levels for youths;

(2) All retail outlets and private individuals should be held liable for negligently providing alcohol to a minor;

(3) Prominent warning labels about the risks of alcohol consumption should appear on all alcohol advertising; and

(4) Local government officials and community coalitions around the country should systematically assess youth access to alcohol in their communities and examine ways to reduce this access.

COMMENT

**By identifying some of the problems of underage drinking to be addressed by this legislation, this declaration of findings will aid the courts and state agencies in interpreting and implementing the specific provisions of the [Act]. This legislation holds underage persons as well as licensed and unlicensed adults and establishments accountable for curbing underage alcohol consumption.**

### *Section 3. Purpose.*

The provisions of this [Act] are intended to establish comprehensive state provisions prohibiting the purchase, possession, and consumption of alcohol by underage persons

### *Section 4. Definitions.*

As used in this [Act]:

(a) "Furnish" means to give, provide, or supply.

(b) "Licensee" means any individual or establishment, or their employees or their agents, licensed by the state to sell or distribute alcoholic beverages.

(c) "[Single state authority on alcohol and other drugs]" means the state agency designated by the governor to plan, manage, monitor, and evaluate alcohol and other drug treatment services in the state.

(d) "Underage" means less than 21 years of age.

COMMENT

**The Commission intends the application of the term "furnish" to be a strict liability offense and recommends that state legislatures express a similar intent if they adopt the term as well. "Furnish" has been used in many state laws concerning underage alcohol consumption. A significant case history exists in which the term "furnish" has been interpreted as a strict liability offense with respect to providing alcohol to underage drinkers.**

### *Section 5. Unlawful Purchase, Consumption, or Possession of Alcohol.*

An underage person shall not:

(a) Purchase, attempt to purchase, or solicit someone to purchase any alcoholic beverage;

(b) Consume any alcoholic beverage;

(c) Possess any alcoholic beverage with the intent to consume it. Possession creates a rebuttable presumption of intent to consume.

COMMENT

**The prohibitions set forth in this section give direct effect to the primary purpose of this [Act]. Prohibition of the purchase (including attempt to purchase), consumption, and possession of alcoholic beverages by underage persons forms the centerpiece of any effective, comprehensive package of state underage drinking laws.**

**Several exceptions may be considered by state legislatures. In subsection (b), a legislature may wish to consider exempting underage consumption of alcoholic beverages during legitimate religious services or activities while under direct adult supervision. In subsection (c), a legislature may wish to allow possession of alcoholic beverages in instances of employment as a bartender, barback, wait staff, busperson, dining establishment host, or sales clerk or stockperson in a liquor store, where allowable by laws regulating those professions. These exemptions should be allowed only when there is direct adult supervision.**

**Any efforts to curb underage drinking need to begin in the home setting. With that in mind, the Commission recommends against any exception for possession or consumption by underage persons in a private home, with or without adult supervision (as found in a number of state alcohol codes). The Commission feels that such an exception sends mixed and confusing signals to parents and youths alike that underage drinking is tolerable under certain circumstances.**

### *Section 6. Law Enforcement Authorization to Seize Beverages.*

(a) A law enforcement officer shall seize any opened or unopened alcoholic beverage that is in the possession of an underage person, provided that such seizure is not inconsistent with the constitution of this state and the United States.

(b) Where a law enforcement officer has seized alcoholic beverages pursuant to this section, such alcoholic beverages shall be destroyed upon determination that the beverages no longer have evidentiary value.

COMMENT

**This section should be construed to allow law enforcement officers to seize and destroy alcoholic beverages in the possession of underage persons in accordance with established procedures of their agencies for handling evidence. The conduct of such law enforcement officials in seizing and destroying such alcoholic beverages, of course, must also comply with state and federal constitutional law.**

### *Section 7. Penalties.*

A person who violates Section 5 is guilty of a misdemeanor and, upon conviction or adjudication of guilt, shall be punished by:

(a) A minimum fine of not less than [$250], no part of which shall be suspended, and not less than [24 hours or more than 32 hours] of community service during hours when the person is not employed and is not attending school or a combination of fine and community service as determined by the court.

(b) Suspension of driver's license.

(1) In addition to the penalty set forth in subsection (a), the court shall order the suspension of the convicted or adjudged individual's driver's license for a period of [90 days] for the first offense, [six months] for the second offense, and [one year] for any offense thereafter. The driver's license of that person shall be surrendered to the court. The court shall immediately forward the surrendered license and a certificate of conviction or adjudication of guilt to the state [department of motor vehicles].

(2) If the individual does not have a driver's license or the driver's license of the individual is suspended or revoked at the time the individual is so convicted or adjudged guilty, there shall be a delay in the individual's eligibility to receive a license or have a revoked license reinstated, equal to the level of punishment established in subsection (b)(1).

(3) If an individual is determined by the assessment process established in (c) to have an alcohol and/or other drug problem and is ordered to submit to a treatment program, the individual shall not have his or her license reinstated until after successfully completing the treatment requirement, even if the suspension periods in (1) and (2) have been fulfilled. Should a treatment program, as required by subsection (c), not be immediately available, the offender, after completion of the period of suspension, may have his or her license reinstated if all of the following conditions are met:

(A) The offender is placed on a certified waiting list until a position for the recommended course of treatment becomes available;

(B) The offender remains alcohol- and drug-free and submits to regular alcohol and other drug testing as ordered by the court;

(C) The offender attends, with verification, no fewer than [five] twelve-step recovery meetings per week, until the course of treatment begins.

If the offender for any reason fails to comply with the conditions of this subsection, the license shall not be reinstated unless the court finds in writing that there are extraordinary and compelling reasons to reinstate the license pending the person's participation in the recommended course of treatment by a date certain to be fixed by the court.

[ (c) {OPTION 1} In addition to the penalties established in subsections (a) and (b), the violator shall be subject to the full application of the [Model Comprehensive Criminal Justice Treatment Act], found in Volume IV, Treatment ].

[ (c) {OPTION 2} In addition to the penalties established in subsections (a) and (b), the offender shall submit to an assessment of alcohol and other drug problems.

(1) The assessment shall be conducted by the [single state authority on alcohol and other drugs], a designee of the [single state authority on alcohol and other drugs], or an inpatient or outpatient treatment program licensed by the [single state authority on alcohol and other drugs].

(2) The court shall order appropriate supervised treatment or education services in accordance with the clinical alcohol and other drug abuse assessment.

(3) The [single state authority on alcohol and other drugs] or its designee shall report to the court on the progress of any offender ordered to participate in a treatment program.

(4) Failure to complete the court-ordered treatment shall result in doubling of the fines, incarceration, community service, and duration of loss of licensure otherwise provided in this [Act], or any combination thereof, as determined by the court. ]

[ (c) {OPTION 3} A person who commits a second or subsequent violation of these sections shall be subject to the penalties prescribed in subsection (a) and, in addition, shall submit to an assessment of alcohol and other drug problems.

(1) The assessment shall be conducted by the [single state authority on alcohol and other drugs], a designee of the [single state authority on alcohol

and other drugs], or an inpatient or outpatient treatment program licensed by the [single state authority on alcohol and other drugs].

(2) The court shall order appropriate supervised treatment or education services in accordance with the clinical alcohol and other drug abuse assessment.

(3) The [single state authority on alcohol and other drugs] or its designee shall report to the court on the progress of any offender ordered to participate in a treatment program.

(4) Failure to complete the court-ordered treatment shall result in doubling of the fines, incarceration, community service, and duration of loss of licensure otherwise provided in this [Act], or any combination thereof, as determined by the court. ]

(d) All convictions in state, federal, or foreign jurisdictions for those misdemeanors substantially equivalent to those defined in Section 5 apply in this state and are subject to the penalties defined in this section

COMMENT

**This section establishes penalties for those persons who violate Section 5. The penalties established in subsections (a) and (b), which have been recommended to the Commission by the National Highway Traffic Safety Administration, should be taken as minimum recommended levels.**

**Subsection (c), Option 1 holds offenders of this [Act] to the full application of the Commission's [Model Criminal Justice Treatment Act], found in Volume IV, Treatment, of the Commission's final report. The [Model Criminal Justice Treatment Act] establishes a procedure through which all those who commit felonies and selected misdemeanors, including all DUIs, are subject to alcohol and other drug testing, assessment of any alcohol and other drug problems by the [single state authority on alcohol and other drugs] or its licensed designee, and referral to an appropriate treatment program. The testing and assessment are made a condition of release pre-trial or probation or parole. The testing and monitoring will be handled by a defendant management agency while the treatment programs will be handled by the single state authority on alcohol and other drugs, a designee of the [single state authority on alcohol and other drugs], or a treatment program licensed by the [single state authority].**

**Because it is anticipated that full implementation of the [Model Criminal Justice Treatment Act] will require several years, the Commission offers Options 2 and 3 to facilitate the speedy adoption of this underage alcohol consumption legislation.**

**In subsection (c), Option 2, the Commission recommends that an initial assessment of alcohol and other drug problems be conducted after first violation of these provisions. This assessment would be conducted by the [single state authority on alcohol and other drugs], a designee of the [single state authority], or a treatment program licensed by the [single state authority] and would provide a determination of whether the violator has any alcohol or other drug abuse problem. Early detection of any such problem improves the probability of reducing detrimental alcohol- and other drug-related incidences later in life.**

**Subsection (c), Option 3 would mandate an assessment of alcohol and other drug problems after a second or subsequent alcohol offense. (The Commission recommends Option 2 over Option 3.)**

**Subsection (d) holds that penalties will apply to a resident of the state, even if the resident committed the misdemeanor in another state, federal, or foreign jurisdiction.**

### *Section 8. Use of Fraudulent Identification.*

It is unlawful for any person:

(a) To use a false or fictitious name in any application for a driver's license or personal identification card or to knowingly make a false statement or to knowingly conceal a material fact or otherwise commit a fraud in any such application;

(b) To display or cause or permit to be displayed or have in such person's possession any canceled, revoked, suspended, fictitious or fraudulently altered driver's license or personal identification card for the purposes of purchasing, furnishing, possessing, or consuming alcoholic beverages;

(c) To lend a personal driver's license or personal identification card to any other person for the purposes of purchasing, furnishing, possessing, or consuming alcoholic beverages;

(d) To display or represent as one's own any driver's license or personal identification card not issued to such person for the purposes of purchasing, furnishing, possessing, or consuming alcoholic beverages;

(e) To fail or refuse to surrender to the state [department of motor vehicles] upon lawful demand any driver's license that has been suspended, revoked or canceled for the illegal purchase, provision, possession, or consumption of alcoholic beverages;

(f) To permit any unlawful use of a driver's license or personal identification card issued to such person for the purposes of purchasing, furnishing, possessing, or consuming alcoholic beverages.

COMMENT

**This section addresses one of the primary means of access to alcohol by underage persons: the use of fraudulent identification.**

### *Section 9. Penalties for Fraudulent Identification.*

A person who violates Section 8 is guilty of a misdemeanor and, upon conviction or adjudication of guilt, shall be punished by:

(a) A minimum fine of not less than [$250], no part of which shall be suspended, and not less than [24 hours or more than 32 hours] of community service during hours when the person is not employed and is not attending school.

(b) Suspension of driver's license.

(1) In addition to the penalty set forth in subsection (a), the court shall order the suspension of the convicted or adjudged individual's driver's license for a period of [90 days] for the first offense, [six months] for the second offense, and [one year] for any offense thereafter. The driver's license of that person shall be surrendered to the court. The court shall immediately forward the surrendered license and a certificate of conviction or adjudication of guilt to the state [department of motor vehicles].

(2) If the individual does not have a driver's license or the driver's license is suspended or revoked at the time the individual is so convicted, there shall be a delay in the individual's eligibility to receive a license or have a revoked license reinstated, equivalent to the length of punishment established in (b)(1).

(c) All convictions in state, federal, or foreign jurisdictions for those misdemeanors substantially equivalent to those defined in Section 8 apply in this state and are subject to the penalties defined in this section.

COMMENT

**This section establishes penalties for violations of Section 8's fraudulent identification provisions. (If the [Model Criminal Justice Treatment Act] is adopted, an alcohol and other drug assessment may be required, in addition to the penalties outlined in this section. If the assessment determines that the offender has an alcohol or other drug problem, then treatment provisions of that [Act] will apply.)**

**As with Section 7, all penalties will be applied to a resident of the state, even if the resident committed the misdemeanor in another state, federal, or foreign jurisdiction.**

### *Section 10. Selling or Furnishing Alcoholic Beverages to Underage Persons.*

(a) Any person who sells, furnishes, gives, or causes to be sold, furnished, or given away, any alcoholic beverage to any underage person is guilty of a misdemeanor.

(b) Any person who violates subsection (a) shall be punished by a minimum fine of not less than [$250], no part of which shall be suspended, and not less than [24 hours or more than 32 hours] of community service during hours when the person is not employed and is not attending school.

(c) All convictions in state, federal, or foreign jurisdictions for those misdemeanors that are substantially equivalent to those defined in subsection (a) apply in this state and are subject to the penalties defined in (b).

COMMENT

**This section addresses another primary means of access to alcohol by underage persons: the intercession of other friends, family members, and adults.**

### *Section 11. Selling or Furnishing Alcoholic Beverages to Underage Persons by a Licensed Individual or Establishment.*

(a) Any individual or establishment that sells any alcoholic beverage to a person whom the individual or establishment knew or should have known was underage, is guilty of a misdemeanor.

(b) Any individual or establishment that permits a person whom the individual or establishment knew or should have known was underage to consume any alcoholic beverage in the premises is guilty of a misdemeanor.

(c) All individuals or establishments serving alcoholic beverages must make a good faith effort to determine the age of persons seeking to purchase or consume alcoholic beverages in the premises by, at a minimum, requesting and checking the individual's valid identification. Any individual or establishment that fails to make such a good faith effort to determine the age of a person who later proves to be underage shall be deemed in violation of this section.

(d) Any individual or establishment that violates subsections (a) and (b) shall be punished by a fine of not less than [$1,000 and no more than $10,000] for a first offense. Any subsequent violations of (a) and (b) by a licensee shall result in the revocation of the liquor license by the state [alcohol beverage control board].

COMMENT

**Underage persons access alcohol through liquor stores, bars, eating and drinking establishments, and clubs. While most of the provisions of this [Act] seek to hold underage drinkers accountable for their own actions, this section seeks to hold individuals and establishments accountable for facilitating underage drinking. By specifying "individuals and establishments," this section includes not only individuals and establishments with liquor licenses, but speakeasies as well.**

**Under subsection (a), individuals and establishments may not sell alcoholic beverages to any person they know or should know is underage. Under subsection (b), individuals or establishments may not allow persons whom the they know or should know is underage to consume alcoholic beverages in the premises.**

**The "know or should know" standard is established in subsection (c), which states that a good faith effort to determine the person's age by checking valid identification must be made. By implication, subsection (c) allows that a licensee shall have an affirmative defense if there was a good faith effort to verify the individual's age.**

### *Section 12. Severability.*

If any provision of this [Act] or application thereof to any person or circumstance is held invalid, the invalidity does not affect other provisions or application of the [Act] that can be given effect without the invalid provision or application, and to this end the provisions of this [Act] are severable.

### *Section 13. Effective Date.*

This [Act] shall be effective on [reference to normal state method of determination of the effective date] [reference to specific date].

## IVHS AID TO OLDER DRIVERS

Mr. WOLF. Some people have expressed concern with regard to older drivers the fact the bill is intended to take licenses away from older drivers, which it is not.

Have you looked at anything with regard to helping older drivers keep their licenses, through the use of IVHS or other initiatives?

Mr. HART. We are certainly very interested in the general problem with respect to older drivers. That is one of the areas in which the simulator will help us get real world data that we cannot get at this point. And, again, that is one of the target groups we are focusing on, but for more specifics on your question, I defer to Mr. Parker.

Mr. PARKER. Yes, we actually have a study at Catholic University looking at the special problems of older drivers and how IVHS may be used to address those problems.

Mr. WOLF. Catholic University here in town?

Mr. PARKER. Catholic University here, yes.

Mr. WOLF. Why them?

Mr. PARKER. It is just a competitive choice to Catholic University.

I think IVHS really has the potential to help older drivers. Night vision is one of the applications for IVHS, and we know the industry is heavily working on night vision enhancement. Some of the other IVHS applications are intersection controls, because we know older drivers are overrepresented in situations where they pull out into traffic and then are hit in side impacts. So we have kind of listed that as a key objective of the whole IVHS program to help older drivers.

Mr. WOLF. What is the status of the Catholic University study?

Mr. PARKER. Well, it is in process now, and I don't recall exactly when that is to be completed, it is mainly problem, identification and identifying the applications, so I suspect——

Mr. WOLF. And the purpose of the study will be to do what again?

Mr. PARKER. To identify for older drivers the best IVHS applications and how they might be implemented through IVHS.

Mr. WOLF. Has that been included in the IVHS grants that have been given around the country to the different universities and different centers?

Mr. PARKER. You know, the Federal Highway Administration has some IVHS centers of excellence at universities, and I am not sure they do. I can check on that and provide it for the record.

Mr. WOLF. Would you? Because we will be looking at that again this year and the administration has put a lot more money into IVHS and maybe one of the four groups developing the IVHS systems architecture could look at that.

Mr. PARKER. All right.

[The information follows:]

None of the current projects at the IVHS Center of Excellence is directed toward older drivers.

Mr. WOLF. Any IVHS reports that have been done regarding older drivers?

[The information follows:]

The agency has published no report specifically relating IVHS to the older diver, although many agency IVHS reports have addressed the need to accommodate a wide range of driver performance capabilities. NHTSA initiated a project last fiscal year to assess older driver crash avoidance research needs. The project will also identify vehicle design practices, including IVHS crash avoidance countermeasures, likely to affect (positively or negatively) the driving safety performance of older drivers.

## DRIVER'S EDUCATION PROGRAMS

Mr. WOLF. What are your feelings with regard to how driver's education is being handled today in the country? Have most schools stopped it? I know the schools around my area have stopped offering driver's ed.

Mr. HART. Yes, we are aware of a reduction in the number of driver's education programs. We are looking at that issue closely, and in fact we are looking at it in relation to a report we are going to be submitting to Congress. With our new leadership at NHTSA, we will be revisiting the issue because we are very concerned about the historic lack of a strong correlation between driver's education programs and downstream safety.

So we are looking at that issue and we are also looking at how it relates to provisional licensing in various States that now have it, and how they can work most effectively with each other. So we are revisiting the entire issue.

Mr. WOLF. Of the 50 States, how many still have driver's education programs?

Mr. BROWNLEE. There is no single data system to tell us precisely what the state of driver's education programs in the states is, but the experts tell us that about half of the systems have driver's ed.

Mr. WOLF. And do the studies show that it has not been successful?

Mr. BROWNLEE. There was an extensive study.

Mr. WOLF. Is that the De Kalb study?

Mr. BROWNLEE. Yes, the De Kalb County, Georgia, study, which indicated that they had limited effectiveness with one of the versions of driver's ed that was looked at. The other program, which was a longer version of the first, was ineffective.

Mr. WOLF. What are your feelings about it? Do you think it is a waste? Have you asked AAA and some of the other groups that are out in front to put together something on this?

Mr. BROWNLEE. Yes, we have. It is a very vexing problem. We called a meeting of experts in the area about a year, ago to give us some advice as to how we should formulate our programs. The consensus of that group was that if we went about it in traditional ways that have been used in the States and school districts for the past two decades, the likelihood of success was very low.

That group recommended that we consider some other options, which would for example, invoke driver education at later stages of the driving experience, combine it with a more systematic look of young driver improvement options Mr. Hart alluded to and that we are now considering.

Mr. WOLF. Do insurance companies still give a driver's education discount to young people?

Mr. BROWNLEE. Some do, Mr. Wolf. I cannot give you the exact list, but some do.

Mr. WOLF. Did this De Kalb study prompt some schools not to offer driver's ed?

Mr. BROWNLEE. I think the De Kalb study paved the way for a general reduction in the emphasis on driver's education over the course of the last 10 or 15 years.

Mr. WOLF. I cannot argue with the study because I have not read it, but do you think it is a good study? Apparently it must be, but we get training for operating computers, scuba diving, or flying an airplane. But not for driving a car?

Perhaps you should get together with AAA and some of the other group. What does the association of driver instructors say?

Mr. BROWNLEE. They are the people that helped formulate the group that came together a year ago. I think the consensus of that group would be that it is worth a try to look at it in different ways than we have looked at it in the past. Their recommendation was that a systematic look, which involves not only driver education as we know it, coupled with other driver improvement programs for young people, like provisional licensing, parental involvement and new technology.

Mr. HART. The essence of the problem is that we are looking at teaching skills, teaching rules of the road and teaching judgment. And the question is: To what extent are accidents involving young drivers related to lack of skills, lack of knowledge of rules of the road or lack of judgment? Driver's education is more suitable for teaching skills and rules of the road than it is for teaching judgment, and that is the essence of the problem we are trying to tackle.

Mr. WOLF. Sure. Is there anything in IVHS that could be helpful?

Mr. PARKER. This is not my area of expertise, driver education, but the experience I have had with raising three children is that if you keep your grades up, if the kids keep their grades up, they get a fairly healthy insurance discount. I cannot remember a discount for driver education, but I can remember one for fairly high grades.

Mr. WOLF. I thought there was one for driver's ed.

Ms. DERBY. There was when I raised my children.

Mr. WOLF. I have five children and they all went through driver's ed, and I thought there was a discount. What do the communities do now that do not have driver's education?

Ms. DERBY. What a number of the communities are doing is folding in special education programs into the schools. So, for example, in a reading class they will deal with safety stories for the younger people; in math they will teach them the stopping distance of vehicles. They will deal with safety practices by integrating them into the regular classroom discussions. They deal with pedestrian safety, with occupant protection, with railroad crossing, with impaired driving. A lot is done with the 402 State and community grant program.

Mr. WOLF. Is it possible for a young person to get a license without going through any driver's ed course at all?

Ms. DERBY. That varies State to State. The programs I have mentioned would have nothing to do with the ease of their getting their license.

Mr. FELRICE. Again, personal experience, Mr. Wolf, I live in Montgomery County and my first daughter went through driver's ed through the schools, then Montgomery County ceased funding driver education. But in the county, in order to get a license at age 16, you must now take a private driver's ed course. So now you pay a few hundred dollars, go to a private school and, upon completion of that course work and road experience, you can get a license at a younger age. If not, you have to wait until you are 17 or 18.

Mr. WOLF. Is that uniform across the State of Maryland or is that in Montgomery County?

Mr. FELRICE. I believe that is a state law. In order to get a license at age 16, you must have taken driver's ed. It can be either through the schools, but if the schools no longer teach it, then through a private organization.

## DRIVER EDUCATION IMPACT

Mr. WOLF. Have you seen any trends emerging concerning a correlation between less driver's ed and accidents? Have you looked at the States that have abolished driver's ed, such as parts of Virginia, to see if there has been any correlation between not having driver's ed and traffic accidents going up?

Mr. BROWNLEE. That analysis has not been done to my knowledge, but it would be a good one to do. I think part of the problem is that driver's ed decisions are made in many States at the local level as well as the State level. Being able to pull together the patchwork of requirements that might exist within the schools for driver education, and matching that up to the performance of individual drivers, would be a difficult thing to do.

Mr. WOLF. I think you should. It seems to me that if you got together with and developed a good curriculum with AAA and some of the other groups, it really would be worth doing. Particularly when you consider the current stress on the American family. All the indicators as to the well-being of the American family are going the wrong way; child abuse, spousal abuse, teen suicides, teen pregnancy, you name it, and it is not good and it is going the wrong way.

I have been a supporter of a bill to increase the personal exemption for children. If the personal exemption had kept pace with inflation, it would be worth $8,200. It is only worth $2,150. I and other Members are in favor of increasing the personal exemption to allow parents to keep more of their hard-earned money whereby they can spend more time with their kids and, hopefully, not have to take that second job or do whatever the case may be.

But when you look how stressed out parents are, there is less time I think for people to take their children out and teach them. And I think driver's ed seemed to be a good program.

I went through it, my kids went through it. I don't know about the De Kalb study. Maybe it just debunked it and said it was not useful. But something tells me if you put together a good course that was not meant to be a joke or it wasn't meant to be where you had the physical ed teacher who had the extra hour and she or he taught the course and it did not matter, I feel it might be helpful.

If you could somehow look at it, I would appreciate it, because I am frightened to think of a situation whereby with the budget cuts taking place that we have a Nation whereby no one is going through driver's ed.

My other question is: What do they do in Germany and in Sweden and places like that? What are they doing there? What are the accident rates in Europe, and are their young people going through driver's ed?

Mr. BROWNLEE. We can do that kind of analysis to the best of our ability as well. I do not have that off the top of my head.

[The information follows:]

The driver education evaluation and demonstration conducted in DeKalb County GA (1978–1982) was the most rigorous evaluation of a driver education program ever conducted. It was the first (and only) evaluation of driver education to overcome "volunteer bias" by randomly assigning students to training or no-training conditions.

Previous evaluations had shown only that young drivers who volunteer to take driver education have fewer crashes than those who do not. The DeKalb program demonstrated that, if driver education is to be successful with all novice drivers, it must be dramatically changed. In particular, an effective driver education program must make complex safe-performance actions easier to learn and it must motivate those who would not normally participate in "driver ed" to learn and perform safe driving actions.

Mr. BROWNLEE. I would just comment about trying to look at accident rates and death rates and so on, for any class of drivers or passengers. The extent to which the data can be confounded by other environmental things going on within a particular jurisdiction, such as the presence of impaired driving requirements, effective alcohol enforcement, for example. All of those things would affect the crash and the death rates that might exist within a State and those would come to play. Whether or not you can sort out the effects of driver's education would be a tough analytical task.

Mr. WOLF. Well, if you could, and maybe get somebody to come by the office so I don't take the Committee's time. I just have two more questions and I will submit a lot for the record.

## UNDERAGE ALCOHOL DEATHS

Mr. WOLF. I would like to thank you for the quick turnaround of data requested last week by my staff relating to underage drunk driver fatalities categorized by blood alcohol content—BAC. According to these data, there were 7,539 drivers under age 21 involved in fatal crashes during 1992, the latest year for which numbers are available. Alcohol was a factor in 26 percent of these fatalities.

In 29 states, including my own, the percentage of alcohol involvement in underage fatalities was even greater than 26 percent, with Texas and Vermont topping the list at 40 percent and 44 percent, respectively. The Chairman might be interested to know, that according to these data, Michigan, at 17 percent, was one of the States with lower alcohol involvement in these teen fatalities.

My question is: How do these data compare with those of previous years? And, can we draw any conclusions, other than that the level of alcohol involvement remains unacceptably high for this group of drivers?

[The information follows:]

The percentage of alcohol-involved drivers under age 21 in fatal crashes has decreased substantially in the past 10 years, from 43 percent in 1982 to 29 percent in 1991 and to 26 percent in 1992. This decrease has been greater than for most other age groups. Since 1987, the percentage of fatalities that were alcohol-related has been lower for persons under age 21 than for persons age 21 and above. It appears that the mix of laws (especially age 21 drinking laws), enforcement, and prevention activities have been effective in reducing youth involvement in alcohol related fatal crashes.

Young people are still overrepresented in alcohol-related crashes as a proportion of their population. their alcohol-related crash level is still unacceptably high, especially since it is illegal for persons under age 21 to purchase alcohol. Effective youth drinking and driving law must be enacted, publicized, and enforced in every state, and alcohol prevention activities must be re-emphasized.

### UNDERAGE DRIVERS FATALITIES BY BAC TABLE

Mr. WOLF. Also, with the Chairman's approval, I would like to submit this table for the record.

[The information follows:]

# DRIVERS UNDER THE AGE OF 21 INVOLVED IN FATAL CRASHES BY THE DRIVER'S BAC
# 1992 FARS - SUB246 (26 MAY 93)

| STATE | TOTAL | BAC .00 | PERCENT | BAC .01-.09 | PERCENT | BAC .10+ | PERCENT |
|---|---|---|---|---|---|---|---|
| Alabama | 216 | 151 | 70.0 | 25 | 11.5 | 40 | 18.6 |
| Alaska | 18 | 12 | 66.5 | 1 | 7.1 | 5 | 26.4 |
| Arizona | 123 | 86 | 69.8 | 11 | 9.1 | 26 | 21.1 |
| Arkansas | 114 | 77 | 67.4 | 19 | 16.5 | 18 | 16.1 |
| California | 739 | 540 | 73.0 | 72 | 9.8 | 127 | 17.2 |
| Colorado | 112 | 77 | 69.2 | 14 | 12.3 | 21 | 18.6 |
| Connecticut | 55 | 45 | 81.0 | 3 | 6.3 | 7 | 12.7 |
| Delaware | 29 | 24 | 84.2 | 2 | 7.9 | 2 | 7.8 |
| Dist of Columbia | 8 | 6 | 69.6 | 0 | 6.2 | 2 | 24.2 |
| Florida | 421 | 339 | 80.5 | 28 | 6.6 | 55 | 13.0 |
| Georgia | 273 | 231 | 84.5 | 15 | 5.6 | 27 | 9.9 |
| Hawaii | 21 | 14 | 65.5 | 3 | 13.0 | 5 | 21.5 |
| Idaho | 55 | 41 | 74.2 | 5 | 8.4 | 10 | 17.4 |
| Illinois | 278 | 209 | 75.1 | 24 | 8.7 | 45 | 16.2 |
| Indiana | 198 | 156 | 78.7 | 16 | 8.2 | 26 | 13.0 |
| Iowa | 107 | 75 | 70.5 | 13 | 12.1 | 19 | 17.4 |
| Kansas | 96 | 78 | 81.0 | 5 | 5.2 | 13 | 13.8 |
| Kentucky | 187 | 144 | 76.8 | 16 | 8.6 | 27 | 14.6 |
| Louisiana | 177 | 121 | 68.2 | 22 | 12.4 | 34 | 19.5 |
| ine | 38 | 27 | 70.9 | 6 | 15.8 | 5 | 13.3 |
| ryland | 103 | 86 | 83.3 | 7 | 6.6 | 10 | 10.1 |
| Massachusetts | 95 | 66 | 69.2 | 11 | 11.1 | 19 | 19.7 |
| Michigan | 272 | 226 | 83.0 | 15 | 5.5 | 31 | 11.5 |
| Minnesota | 114 | 78 | 68.0 | 9 | 7.6 | 28 | 24.4 |
| Mississippi | 145 | 117 | 80.4 | 8 | 5.6 | 20 | 14.0 |
| Missouri | 198 | 140 | 70.6 | 21 | 10.8 | 37 | 18.6 |
| Montana | 37 | 24 | 64.8 | 4 | 11.2 | 9 | 24.0 |
| Nebraska | 66 | 51 | 76.7 | 7 | 11.2 | 8 | 12.1 |
| Nevada | 29 | 21 | 71.0 | 2 | 7.3 | 6 | 21.7 |
| New Hampshire | 14 | 13 | 92.5 | 0 | 0.2 | 1 | 7.3 |
| New Jersey | 139 | 119 | 85.3 | 10 | 6.9 | 11 | 7.8 |
| New Mexico | 68 | 50 | 73.3 | 5 | 7.4 | 13 | 19.4 |
| New York | 302 | 239 | 79.1 | 25 | 8.3 | 38 | 12.6 |
| North Carolina | 225 | 171 | 76.0 | 18 | 8.2 | 36 | 15.8 |
| North Dakota | 21 | 13 | 62.0 | 2 | 7.5 | 6 | 30.5 |
| Ohio | 296 | 239 | 80.8 | 15 | 5.0 | 42 | 14.2 |
| Oklahoma | 149 | 103 | 68.8 | 11 | 7.7 | 35 | 23.5 |
| Oregon | 81 | 65 | 79.8 | 5 | 6.5 | 11 | 13.7 |
| Pennsylvania | 245 | 177 | 72.4 | 21 | 8.5 | 47 | 19.1 |
| Rhode Island | 13 | 12 | 90.9 | 0 | 1.0 | 1 | 8.1 |
| South Carolina | 156 | 126 | 80.6 | 7 | 4.4 | 23 | 15.0 |
| South Dakota | 37 | 24 | 65.9 | 1 | 3.3 | 11 | 30.8 |
| Tennessee | 237 | 174 | 73.2 | 17 | 7.1 | 47 | 19.6 |
| Texas | 614 | 367 | 59.8 | 89 | 14.6 | 158 | 25.7 |
| Utah | 62 | 52 | 84.0 | 5 | 8.9 | 4 | 7.2 |
| Vermont | 20 | 11 | 56.3 | 3 | 13.9 | 6 | 29.8 |
| Virginia | 171 | 123 | 72.1 | 15 | 8.7 | 33 | 19.2 |
| shington | 122 | 88 | 71.9 | 13 | 10.9 | 21 | 17.2 |
| t Virginia | 73 | 49 | 66.8 | 7 | 10.1 | 17 | 23.1 |
| sconsin | 146 | 104 | 71.5 | 20 | 13.6 | 22 | 14.9 |
| Wyoming | 24 | 15 | 63.0 | 4 | 16.2 | 5 | 20.8 |
| TOTAL | 7539 | 5590 | 74.1 | 679 | 9.0 | 1270 | 16.8 |

## CRASH DATA OF YOUNG DRIVERS

Mr. WOLF. In your budget justifications, you note that the 1995 program is designed to foster central crash data analysis and research. However, some have suggested that analysis of crash data will tell us little about the risky behavior associated with accidents involving younger drivers.

In August 1993, NHTSA sponsored a workshop focusing on young driver risk taking at Elkridge, Maryland. Workshop participants commented that the current sources of data about youthful risk taking are limited.

In fact, a question was raised about a crash study being conducted in my own State, and I am quoting from the workshop report: "It was felt that the data collection activities in Charlottesville, Virginia, do not focus on risk taking, but on crash outcomes. Police accident reports, driver statements, coroner information, and other data are being collected, but all are somewhat subjective and not much help in studying risk taking. Accident-based data do not allow investigation of experience versus inexperience in young drivers because accident forms lack information on the level or the amount of driving experience."

Obviously, this kind of data would be helpful in developing more effective training programs for novice drivers. In your planned focus on crash data analysis, how will you address this lack of data on younger drivers, an age group that is overrepresented in fatal crashes?

[The information follows:]

Unfortunately, the types of data required to understand the contributions of individual risk taking to crash causation is beyond the scope of the type of public records on which crash analysis is conducted. Accordingly, any efforts to address these individual-specific types of issues will require special studies that collect in-depth data on a limited number of cases.

## NOVICE DRIVER CRASH ANALYSIS

Mr. WOLF. Does NHTSA have any plans to develop a model for crash analysis which would take key factors into account involving the inexperience and risky behavior of novice drivers?

[The information follows:]

NHTSA does not currently have plans to conduct such a study. However, the agency does have numerous projects underway and planned for the future to explore the role of inexperience and risky behavior in crash involvement.

## DRIVER'S EDUCATION PROGRAMS

Mr. WOLF. Does NHTSA have any proposals or ongoing efforts to identify proposals for improving driver education programs nationwide?

[The information follows:]

In April 1993 the agency convened a two-day workshop to identify training requirements designed to reduce young driver risk taking and improve decision making skills. Eleven national and international experts in traffic safety education and decision making attended. The agency published a final report on the proceedings in February 1994.

The agency has prepared a report to Congress on a research agenda for improving novice driver education. This report is currently being reviewed by NHTSA's new senior management team. The agenda activities start in fiscal year 1995.

Mr. WOLF. Are any programs included in the fiscal year 1995 budget to address this problem?

[The information follows:]

The agency will continue to support two research projects related to youth risk-taking through fiscal year 1995. One of these studies is exploring how youth risk-taking has been addressed in relation to other health-risk areas and applying these approaches to traffic safety issues. The second is focusing specifically on methods for increasing safety belt use of teenagers. Results of both of these studies are essential for any future efforts to develop driver education curriculum materials.

Mr. WOLF. Does NHTSA feel that more uniform curricula and instructor standards need to be established? If so, should these be State or national standards and how should they be implemented?

[The information follows:]

If there is agreement on what needs to be taught, then establishing teaching and teacher standards can contribute to more consistent outcomes. However, since the individual states exercise oversight over educational programs, the Agency can only recommend model programs and standards. NHTSA will follow this approach by involving the national organizations related to driver education and driver licensing.

## INTEGRATING LICENSING AND EDUCATION

Mr. WOLF. It is widely believed that more direct integration of driver licensing and education would be an effective way to improve the skills and decision making of novice drivers, thus reducing their risk of being involved in collisions. Does NHTSA agree with this approach, and, if so, what initiatives could accomplish this integration?

[The information follows:]

NHTSA's 1993 workshop on driver education found that integrating driver education with a graduated licensing system has the potential to be an effective crash-reduction countermeasure. A major difficulty is that no state currently has a graduated licensing system that contains all of the elements proposed by NHTSA and the American Association of Motor Vehicle Administrators. As advanced driver education curriculum suited to integration in graduated licensing does not exist, it is difficult to describe the most appropriate initiatives to accomplish this integration without more development work.

## PUBLIC-PRIVATE COOPERATION ON DRIVER'S EDUCATION

Mr. WOLF. In today's environment of "reinventing government," public-private partnerships have become increasingly important. I am aware that such organizations as the American Automobile Association and the American Driver Training and Safety Educators Association are concerned about driver education. These groups are working to improve both the quality of driver education, and its availability in schools nationwide.

What opportunities exist for public-private partnerships to enhance driver education?

[The information follows:]

Opportunities exist at several levels, from curriculum development to materials production to course implementation. Historically, there has always been a public-private partnership with driver education. Since it has never been a Federally mandated program, the agency has always worked with the private sector and the states. If driver education is to be improved, it is vital that this partnership continue.

Mr. WOLF. What action, if any, is NHTSA contemplating to take advantage of these opportunities?

[The information follows:]

The Agency has always involved the private sector and the states in its driver education activities. For example, in the workshop on young driver risk taking held last year in Elkridge, MD, participants included individuals from several state agencies and representatives of the American Automobile Association and the American Driver and Traffic Safety Education Association.

Mr. WOLF. With the general decline in driver education programs, it is doubtful that insurance companies are as willing to grant reduced premiums to young drivers. Would this be a potential area where a public-private partnership could be forged, where insurance companies could be urged to support high school driver education courses meeting State or nationally approved standards by granting reduced premiums to drivers who successfully complete approved courses suitable to their age group and driving experience?

[The information follows:]

Insurance companies have traditionally used their actuarial data to determine when reduced premiums are possible. For example, they give reductions to reported non-smokers and safety belt users because actuarial data supports such a reduction. Many insurance companies have given reductions for driver education, and some still do.

Based on past performance, insurance companies are likely to support any proven crash-reduction countermeasure. If an innovative driver education program can be produced that reduces crashes for those who take it, insurance companies may support it.

## ELKRIDGE CONFERENCE IMPACT ON DRIVER TRAINING

Mr. WOLF. The focus of your April 1993 workshop at Elkridge, Maryland, was to identify research and development needs for driver training in order to reduce young driver risk taking and improve their decision making skills. Thirty-five recommendations were developed as a result of this workshop.

What are NHTSA's plans for following up on these recommendations?

[The information follows:]

The Agency will use this information in several planned activities. First, the information will be used in the recommended research and development of NHTSA's Research Agenda For an Improved Novice Driver Education Program. Second, the information is being used in our on-going research to better understand young driver risk taking. Third, as new research and development activities are initiated, the information will be used to help design those activities.

Mr. WOLF. One of those 35 recommendations is the development of realistic simulations that young drivers must complete before getting into a car. However, there has been some concern that simulators and other "benign" teaching methods—e.g., experience with lawn tractors—may actually work to desensitize young drivers to real risk by making them overconfident about their abilities.

How does NHTSA reconcile these two schools of thought? Do you have any data about the value of simulators as the precursor—but not the replacement—for on-the-road training?

[The information follows:]

There has not been any research that indicates that simulation, in any form, can replace on-the-road training or cause new drivers to be greater risk takers. Part of the discussion that surrounds the use of "simulation" for driver education, especially for new drivers, is caused by the broad definition and resulting perception of the term. Many people think that a simulator is a mock-up of a vehicle that will provide experience equivalent to driving on a roadway. In fact, most driving-related simulators are much simpler than that. Some may involve a rough replica of a driver's seat, but offer extremely limited driver's point-of-view and no motion while others are simply computer screens with a "joystick." Some are fully interactive, but others allow no control over the simulation scenario. (Strictly speaking, a classroom instructor using a black board to demonstrate driving techniques is using simulation.)

The art of simulation is rapidly expanding into totally new realms, and extremely sophisticated systems (such as virtual reality) are becoming increasingly affordable. With the conversion of military technology to civilian applications we may see the development of previously inconceivable simulators. The practical effects of these new approaches are currently unknown. Because the driving task is so complex, simulation can play a variety of roles in preparing new drivers to be safe drivers. As part of its research and development program, the agency will investigate a variety of simulation approaches and adapt those that prove to be effective teaching tools, as part of NHTSA's overall technical assistance offered to State and community traffic safety programs.

## HATCHBACK VEHICLE EJECTION FATALITIES

Mr. WOLF. An average of 147 people were killed in 1991 and 1992 in crashes in which they were ejected through the rear windows and doors of hatchback vehicles. According to Secretary Peña, this raises the possibility that tougher standards are needed for the construction of door latches in hatchback cars, minivans, stationwagons, and four wheel drive vehicles. In a summary of these accidents just released by NHTSA, you indicated that 95 percent of these victims were not wearing seat belts.

Certainly, the design of this so called "hatch latch" needs to be addressed, but isn't this more of a seat belt usage issue?

[The information follows:]

The agency recognizes that seat belts are the most effective countermeasure for ejection reduction. However, the agency's 1988–1992 National Accident Sampling System data indicate that over 95 percent of rear door ejections occurred to unbelted occupants. Therefore, the agency believes that other ejection prevention countermeasures, in addition to messages to wear seat belts, may be needed for the reduction of rear door ejections. Research is underway to improve latch and glazing designs to reduce occupant ejections through doors and glazing openings, including those in the rears of vehicles.

## SAFETY BELT USAGE LEVELS

Mr. WOLF. The DOT has set a national goal of 75 percent belt use by 1997. Given the statistics of 95 percent non-use in the hatchback ejection fatalities, is the goal of 75 percent high enough?

[The information follows:]

The goal of 75 percent use by the end of 1996 is an intermediate goal, not a final goal. If a sufficient number of states can be convinced to upgrade their current safety belt usage laws to allow for primary enforcement and to implement usage laws to allow for primary enforcement and to implement periodic, highly publicized efforts to enforce these law, usage rates of 85–90 percent should be attainable and will be targeted.

Mr. WOLF. Secretary Peña recently announced that 66 percent of Americans used safety belts in 1993, an increase over a 62 percent use rate in 1992. However, it has been reported that several industrialized nations, including Canada, Great Britain, West Germany, and Australia, have belt use rates significantly higher than that of the U.S.

Are there methods that these countries are deploying from which we could possibly learn?

[The information follows:]

Canada's success can be traced to three factors: belt use laws with primary enforcement, assessment of demerit points for seat belt violations, and utilization of periodic, highly publicized enforcement, often called Special Traffic Enforcement Programs or STEPs. These enforcement techniques have been used for the past decade to increase motorist awareness and expectation that the Canadian provincial laws will be enforced.

In the U.S., belt use rates in states with primary enforcement laws average 13 percentage points higher than states with secondary enforcement laws. California switched to primary enforcement in 1993 and the statewide use rate increased by 13 percentage points (to 83 percent) during 1993.

North Carolina, which already had a primary enforcement law, was able to increase its statewide use rate by 15 percentage points in 1993, by employing the same STEP enforcement strategy used in Canada.

NHTSA is urging states to join in a national campaign to increase safety belt use rates (and lower alcohol-related fatalities) by incorporating these legislative and enforcement features into their programs. It should be noted, however, that other factors appear to be involved in comparing the U.S. experience with that of foreign countries. In nations such as Great Britain and Australia, for example, usage rates increased to, and remained at very high levels, immediately after seat belt use laws were enacted. This occurred without any special enforcement efforts and appeared to represent a societal difference in the reaction to such laws.

Finally, all of the foreign countries you mention enacted their use laws 8–10 years before the first use law was passed in the U.S., and thus those countries have had more years of experience to increase their compliance levels.

## CADAVER USE IN CRASH TESTING RESEARCH

Mr. WOLF. What about the controversy about the Germans using cadavers for research? What is the status of that? What do we do here; and was there any Federal money going into the German project?

Mr. HART. I will let Mr. Parker address that.

Mr. PARKER. With regard to the last question, yes, there was NHTSA money going into the experiments at the University of Heidelberg. From what we understand, talking to Dr. Caliaris over there, who runs that program, that the controversy is not nearly as high at it was. It flared up and has died down. They are in the process of doing a national review of using cadavers for medical research and scientific research, and it is something that the U.S. did back in the late 1970s and early 1980s.

Mr. WOLF. We used to do it here?

Mr. PARKER. We did the same type of national review of the policy of using cadavers for highway safety research, motor vehicle safety research. And out of that came guidelines that require us to essentially have an ethical review of using the cadaver in a particular experiment.

Mr. WOLF. Like next of kin being notified?

Mr. PARKER. That is one of the things that is done. But the first question is if the research is critical research and the use of cadavers is essential. Those are the first two questions you have to answer. Then, after that, we require the institutions that we do business with to have committees to review themselves whether this research is ethical.

Mr. WOLF. Have those first two questions been answered?

Mr. PARKER. I am sorry?

Mr. WOLF. Is it necessary?

Mr. PARKER. Yes, we believe it is necessary. There were two National Academy of Science studies done and both of those pointed to the absolute criticality of using cadavers in injury research.

As a matter of fact, I did a lot of interviews, media interviews with regard to this issue when it first came up, and what I found was that there was not any organized opposition. As a matter of fact, the reporters I talked to said: Do you know anybody that is against this research? I said, I don't particularly know anybody against this research. And so I think in the U.S., the interest in the story just died.

Mr. WOLF. I guess the problem was they were using the cadavers without the families consent.

Mr. PARKER. Well, it turned, as a matter of fact, at the University of Heidelberg they actually had family permission, so there was a lot of misinformation as part of that. But as a result of all that, as I said, there is a national review in Germany of that process, and that is kind of critical to our interest because we find that to be a very good research center.

Mr. WOLF. And how much Federal money went into that?

Mr. PARKER. It turns out to be around $250,000 to $300,000 for a couple of years of research.

[Additional information follows:]

We currently have a five year research agreement with the University of Heidelberg for a total of $500,000. To this point in time, we estimate that they have expended approximately $250,000 conducting research to better understand the injury process in restrained adults in frontal crashes.

Mr. HART. The ultimate goal is to do all that research either by computer modeling or with dummies. But in order to make the computer modeling and dummies realistic, the cadaver research is essential.

## CHILD SEATS WITH AIR BAGS

Mr. WOLF. The child seat belt question, safety seats for children, where are you on that insofar as getting word out to parents that have bought the seats; how is that moving along?

Mr. HART. We have just issued a rulemaking that addresses several aspects of that question. In particular, in this rulemaking we looked at the issue of rear facing child safety seats in air bag seats, and we have warned against that and we have mandated that labels be placed on the seats. We have mandated that information be indicated in the owner's manual.

Mr. WOLF. On the seats that you purchase?

Mr. HART. Yes, the child safety seat itself, in the automobile owner's manual, and also in the automobile itself.

Mr. WOLF. Of course, the manual—I don't think I have ever read my manual. Maybe I should. Maybe I am the only one in the room that has not read the manual, but I think the manual does not really quite do it. I will read it tonight, though, so you can ask me tomorrow if I did.

Mr. HART. In case you are not the only one, that is why we require the label to be on the seats and in the car itself.

Mr. WOLF. Where will it be in the car?

Mr. HART. I will ask Mr. Felrice to give you the details on that.

Mr. FELRICE. New vehicles that have passenger air bags have to have at least an insert in the owner's manual already. That became effective March 1st. Beginning September 1st, they will have to have information on the sun visor, among other warnings.

Mr. WOLF. So when you pull it down—

Mr. FELRICE. It can be on either side. If it is on the side that you cannot see unless you flip it down, there must be a warning on the instrument panel that says air bag, see sun visor. Hopefully, the people will then flip down the sun visor. If it is on the side that faces you, you do not need the redundant warning.

Mr. WOLF. What will the warning say?

Mr. FELRICE. It will caution people. It is a general air bag warning. It will caution people to wear safety belts; to not place rear facing child seats in that seating position; not to sit too close to the air bag; not to put anything between the air bag and the occupants. And then it is going to refer them back to the owner's manual for additional information.

Mr. WOLF. What about people, and I know you cannot protect every circumstance, but what about people that have bought cars and that are out there now? Because I see front car seats out there now—I don't know if the people have air bags, to be honest with you, but they are relatively new cars, and certainly I think a significant number would.

One of the reasons for the purchase of the car I bought, I wanted dual air bags. So is there anything being done for somebody who just bought the car and the warning is not there?

Mr. FELRICE. We are trying to do everything we can. The Secretary has taken a very personal interest in this subject. He issued a video news release which was sent to media outlets last month, and that got fairly good publicity. We are continuing to inform the media.

We have worked with the American Academy of Pediatrics and they have inserted information in their publications which go to all pediatricians to caution consumers not to place a rear facing restraint in that seating position with an air bag. And we are using other avenues with the States and child safety interest groups to also get the word out, but it is going to take a continuing effort on our part.

Mr. WOLF. Just to help, what are the problems?

Mr. FELRICE. The problem is that the rear of the child restraint—the child is facing backwards. The rear of that restraint tends to be up against the instrument panel and that is where the air bag deploys and it deploys at a high velocity, a lot of energy, obviously, to have it deploy in a fraction of a second. That force can push the child restraint and, obviously, these are for infant restraint usage, for children under a year of age or under 20 pounds, and that energy can, by itself, cause harm to the child. It can result in head or neck injuries that could be very serious.

Mr. WOLF. Have we had any deaths?

Mr. FELRICE. We are not aware of any injuries, thankfully, and we do not want to have any.

Mr. WOLF. How did it get out, then, that there was a problem?

Mr. FELRICE. Well, the agency and automobile manufacturers and child safety seat manufacturers were looking at this area in late 1991 and we funded some research of our own about September or October of that year.

When we saw the films and got the readings, the instrumentation readings, we saw that the forces on the children in these rear facing restraints were much greater with the air bag than in an equivalent vehicle without the air bag. So we immediately put out a consumer advisory in December 1991. That then lead to the two rulemakings that Mr. Hart mentioned to require warnings in the vehicle and now on child safety seats.

Mr. WOLF. So we are not really sure it is a problem, then?

Mr. FELRICE. It can be a problem. It can be a severe potential problem, but we did not want to count the injuries before we acted. So this is really a health prevention type of activity.

### BELTWAY SAFETY INITIATIVE

Mr. WOLF. In closing, and maybe let me just thank you, Mr. Hart. I appreciate NHTSA's help in the Beltway safety issue. That was very, very helpful, and we look forward to working with you and Mr. Slater to follow up on the recommendations being made. But I appreciate that very, very much.

Mr. HART. We are involved with Federal Highway and other modes within the Department and we look forward to a continuing cooperation.

Mr. WOLF. Thank you very much. I have no further questions, Mr. Chairman.

### EMS PROGRAM FUNDING

Mr. CARR. Mr. Coleman.

Mr. COLEMAN. Thank you, Mr. Chairman.

I wanted to address the issue of the emergency medical services. First, I want to thank the Assistant Secretary, Ms. Stoll, for being here, your input is critical in the area of the budget and how it is that we are allocating our resources. It makes a good statement for this particular segment of the Department of Transportation that you are here.

The emergency medical services requested about a million and a half dollars in 1994. It was cut back to $614,000 and the request for next year is $769,000. Am I correct on those numbers?

Mr. BROWNLEE. That is correct.

### PEDIATRIC EMS SYSTEMS

Mr. COLEMAN. As I mentioned at a previous hearing with the Transportation Safety Board, I am concerned about the lack of pediatric emergency medical services. Has NHTSA addressed this issue through any demonstration projects or are you planning to do so. The problem is one of actual treatment in trauma care units.

We are finding that while they are geared for trauma care, many of these emergency facilities or trauma care units within hospitals are not accessible for children.

Do you have any demonstration projects or are you planning any in that area? Do you think it is appropriate to do some?

Mr. HART. I will let Mr. Brownlee answer that, if I might.

Mr. BROWNLEE. Certainly it is appropriate. That is one of those areas where there is a relationship with the Department of Health and Human Services that bears heavily on the question that you asked. While NHTSA has overall systems responsibility for looking at EMS in the States, the Department of Health and Human Services has responsibility for improving EMS for pediatric populations through its Maternal and Child Health Bureau.

This is one of those areas where we do not overlap and would not engage in any special demonstration projects, at our initiative that would be covered by them.

### COORDINATION WITH HHS ON EMS PROGRAM

Mr. COLEMAN. I noticed in the overall budget request that one of the program objectives of the agency in transportation is to see to it that we have better coordination with the Department of Health and Human Services.

I am very interested in whether or not we will be able to accomplish that. I noticed in your budget request, you highlight a lot of problems with rural emergency medical services. The great difficulty that some communities face is the distance to the nearest pediatric facility. In my community of El Paso, Texas the nearest Children's Hospital is probably 300 miles—and I am not sure Albuquerque has one.

The truth of the matter is emergency medical services for children is unavailable for a radius of 300 miles in any direction. Even if you have a MAST system provided by the military, which has provided services for emergency medical services in those far-flung rural areas, regions of the State that are not near hospitals that can stabilize individuals who are injured, would Health and Human Services and your agency be able to come up with some ideas about how we can better treat children in this situation.

Mr. BROWNLEE. Yes, I think that is an important priority, and your observation about the emphasis in our budget and what we would like to do for 1995 is correct.

The bulk of the fatalities occur in this country in rural areas. By improving emergency medical care within those areas, hopefully we can have some effect on the number of deaths that occur in rural areas.

One of the things that we feel very strongly about is to better understand where we can have the most effect in rural areas in order to improve medical care. We have done some studies in the State of Montana, and have two more under way, to try to get a better sense of how much of the mortality that occurs in rural areas is preventable by better transportation, better care when patients get to hospitals, etc. And I think it is very important at this juncture, when we are at the front end of that whole problem, to understand where we have to make the adjustments in order to improve the entire system.

### FEDERAL INTERAGENCY COOPERATION ON EMS

Mr. COLEMAN. I would make a suggestion. I know we talk about HHS, but it seems to me the Department of Defense can play a role. DOD plays a key role in my part of the country. Whether or not we were able to permanently station units with that capability in rural areas is also critical. I have taken up that issue on a number of occasions with the Department of Defense in my region. We have had that service, then had it removed with cutbacks in Defense, nonetheless supplementing it with guard and reserve units who are also capable of medivac efforts.

It seems to me that this agency especially could be a coordinating vehicle for this whole effort with HHS. I don't suggest that you have a demonstration project for children, but somebody ought to. I am concerned about the fact that we are finding an inability for trauma care units, some of which are the finest in the world, to take care of children.

We need to address the pediatric side of traumacare some agency needs to take the lead. And if it is not you, it should be HHS I would hope that we could coordinate our various agencies on which we all spend our tax dollars to address this.

Mr. BROWNLEE. You mentioned military equipment availability to reach rural areas, and the MAST program, which is the organization within the military that helps out when the need exists, particularly in disaster times. Our agency is the agency that coordinates the military MAST program, and tries to coordinate the availability of those kinds of services in areas where they are needed within the States.

That is an important component of the kind of help that might be available to rural areas.

Mr. HART. Mr. Coleman, as you noticed from the budget request, we have been working with EMS substantially and we are looking to do more of that now. But I would like to note that the emphasis on health care has created an exciting opportunity for us to improve the relationships in the highway traffic safety community between EMS and the enforcement and all the other people in the traffic safety arena, and that is one area we are certainly looking at and we would look to work cooperatively with HHS on those kinds of matters.

## PEDIATRIC EMS STATE PROGRAMS

Mr. COLEMAN. I think, Mr. Chairman, it might be good if the Committee were to consider at some point language with respect to how we deal with the pediatric emergencies and to obtain a report about the coordination among agencies. I may attempt to propose that or at least suggest that that is one way perhaps we could go forward.

My concern also is in the area of, in the EMS portion itself. I noticed in reading your budget request that there was evidently some technology you were attempting to transfer. Please expound on that a little in this whole EMS provided to the States. I am not sure exactly what it is you are attempting to do.

Mr. BROWNLEE. One of the principal programs we have in the EMS work is to provide assistance to the States to assist their statewide programs and to examine such things as statewide coordination, availability, training, all of those items.

The assessment program identifies State needs that need to be filled in one way or another. One of the ways that we fill them is through the training programs that we develop for emergency medical technician training, clear on through a variety of other courses we maintain that are available to the States in order to make sure that their personnel are trained correctly.

We have developed two cources, which we think are going to have major application, particularly in rural areas. The first is called the "Bystander Care Curriculum," which is what a person should do when they first arrive on the scene of an accident, and that is essentially to keep the person alive until EMS arrives. The second is "First Responder" for police and emergency personnel, designed to train them to be better prepared and how to cope with a medical emergency that exists in an accident.

When we speak of technology transfer, it is in terms of training to help the States to better manage their own EMS programs.

### RURAL EMS NEEDS

Mr. COLEMAN. I am interested in the inability of some rural hospitals to stabilize a victim of an accident. It seems to me part of our overall effort as a country ought to be to see to it that either we get that person to a trauma care unit. Let me give you an example.

In Van Horn, Texas, where Interstate 10 joins other State highways, accidents occur there oftentimes with people falling asleep at the wheel. It is pretty long and lonely. The next town is 30 miles away in either direction and they are very small towns at that. I would say that the nearest trauma care unit is 120 miles away from Van Horn, Texas.

Even if a MAST system or medivac system of some form worked, even if you had the finest EMS capability there, a lot of times that hospital cannot take them because of crowding conditions in a trauma care unit. I have had nurses at Little Van Horn Hospital tell me that patients die because they could not be accessed into a trauma care unit anywhere close enough that would have been effective.

A part of this overall issue is not just that we fix one link of it or that we look at one link of it. When dealing with HHS, we try very diligently to see to it that we are not leaving out some components. Accessibility to the trauma care unit has got to be a piece of that.

I only mention that because those are facts. Those are things that literally happen and have happened already this year. In Montana similar things probably occur. I am sure I am not alone in having this kind of problem. I cite it because we may not be doing everything along that chain that we need to do to prevent deterioration of the victim.

Mr. BROWNLEE. I would just like to make a point that supports what you are saying about the availability of care within the hospital once patients get there. The Montana study we conducted, indicated that on an overall basis, upwards of 20 percent of those who died need not have, and the majority of those who did were in the hospital. The EMS system itself, outside the hospital doors, worked well. Patients were delivered on time, and the care was appropriate in most cases. The problems that occurred in Montana were, indeed, in those small town hospitals that exist throughout that State.

### HEALTH AND HUMAN SERVICES DEPARTMENT (HHS) RULES ON HOSPITAL CLOSING

Mr. COLEMAN. The problem of course is also HHS has made some decisions along the way in their rulemaking authority. One thing to do is close the hospital. If they do not have enough qualified nurses, you do not have a hospital. I don't know that that solves the problem either. I think we have to begin to look at other issues. We have to be diligent in trying to tie together your agencies with that of Health and Human Services and where they are headed.

I look forward toward us helping you to facilitate the kind of cooperation I think is necessary if we are going to do these studies and do them right, or get the kind of help that the States and local communities need. I think that is what we really should be here for anyway.

I appreciate your testimony on that particular subject this morning.

Mr. HART. We are looking forward to working with the Committee on this issue. In addition to health care being the reason we are committed to working on EMS issues, you are obviously aware that President Clinton has nominated Ricardo Martinez to head this agency, who is an emergency care specialist, so I can assure you he will be very interested in working with the Committee on those types of issues.

## BILINGUAL PROGRAMS

Mr. COLEMAN. Good. I appreciate that. I wanted to also compliment you for developing the campaign that was geared towards the bilingual. In my part of the country, we think that is important. I know you recognize the need to deal with language barriers that are sometimes barriers to access to the kind of care people need, and I appreciate that.

Mr. HART. That is also part of our general need to target some of our programs more specifically, and bilingual approaches are one of the examples of that.

Mr. COLEMAN. And it is not easy. A lot of us recognize the problems that you confront. Some in politics say you should not be doing it; some taxpayers say you should not. At the same time, I think most of us recognize that you have to overcome all that and then you have to figure out how in the world we can afford to do it and do it effectively. I appreciate all of you being here and testifying today.

Thank you.

Mr. HART. Our pleasure.

Ms. STOLL. I would just like to add on behalf of the Secretary and the entire Department, I believe when the Secretary testified here, and certainly in many public statements, he has indicated that attention to the safety of children is uppermost in his mind. He has two young kids himself and he frequently speaks about it and has taken a very active role in this, and I know will be delighted to be working with you in moving this forward.

Mr. COLEMAN. Thank you.

Thank you, Mr. Chairman.

Mr. CARR. I want to thank the gentleman for his suggestions in the way of the study and look forward to working with you on seeing if we cannot accomplish the gentleman's goals.

Mr. COLEMAN. Thank you, Mr. Chairman.

## ODOMETER FRAUD PROGRAM

Mr. CARR. We have a large number of questions that we are going to ask for the record. In the interest of time, we will not go through them all.

I have a couple of items, though, that I would like to raise with you. Madam Assistant Secretary, this question is really for you, although it does impact on NHTSA.

A letter has been brought to my attention that was written to the Secretary on January 6th by my good friend, the dean of my delegation and the chairman of the Energy and Commerce Committee, Congressman John Dingell. In that letter he talks about the proposal to disband the odometer fraud section of NHTSA.

Of course, he is very concerned about that proposal. There are really two questions. One question is when can Chairman Dingell expect a reply to that letter? You were not prepared for that question, were you?

A second question deals with Section 414 of the law, which requires DOT to investigate and enforce against odometer fraud: In view of the requirement that DOT enforce the law, how does it propose to do so without the Odometer Fraud Division of NHTSA?

Mr. HART. Let me start out by saying that that letter is in process and we are hoping to have an answer forthwith within a week or two. I apologize for the delay on that, but we are working on it and we do plan to get back to that immediately.

As a generic response, there is a history to the odometer fraud program. I think you are aware that last year we asked for some funding for some aspects of it. I will let Mr. Boehly go into more detail on that. We did ask for some funding last year and did not receive any, but in generic terms, in times of tightening federal dollars, what we are trying to do is do all we can to improve highway safety, and that is not squarely within the highway safety bailiwick. That is why you are seeing reduced activity on that.

But let me defer to Mr. Boehly on some of the details regarding the history of the program and where it stands today.

Mr. BOEHLY. Yes, Mr. Carr. Last year we requested in our 1994 budget $100,000 for the odometer fraud program. We did not receive that from the Congress. This year, as we prepared our 1995 budget, as was said here, we had to look at the mission of the agency, principally a safety agency. We had to look at the activities within the Department. There are obviously many programs competing for a very limited amount of funds.

There is also the issue of how the odometer fraud program has been operational; how it has been working. Is it doing its job and should we do an evaluation? As the Congress said last year, we want to see an evaluation before we decide the best way to proceed with it. So on the basis of those factors, a decision was made not to proceed with a request for funding for fiscal year 1995.

## ODOMETER GRANT PROGRAM

Mr. CARR. Well, this Committee did not supply you with funds for the grant program. We may well not supply you with funds again on that if you are to ask for them. The question is not about the grant program but about who in the federal government or who at DOT, if not NHTSA, is going to be looking at odometer fraud as required by the law?

Someone should enforce the law, and that person or persons should be identified. We would like to line up all functions of the government into some nice, neat, cubbyhole: Frankly, some of them just do not line up neatly. I would agree with you, NHTSA is primarily a safety agency, and what does odometer fraud have to do with safety? But, the point is, if you do not want this responsibility, I think it is important that it be placed somewhere where there is enthusiasm about the task at hand. If you do not have the required enthusiasm, then I don't think we ought to push on that one.

But where would you suggest, Mădam Assistant Secretary, this responsibility go if not within NHTSA?

Ms. STOLL. It is possible that the program could go to Justice. We have had some discussions about this in the course of developing the budget, and I think you have heard basically the essence of that conversation; that it is not solely a safety issue and, therefore, it does not belong in NHTSA.

There has been conversation and I will be happy to get back to you, sir, with the state of that conversation with respect to other agencies being contacted and what has been discussed.

[Additional clarifying information follows:]

During Departmental deliberations on the President's fiscal year 1995 Budget, the possibility of transferring NHTSA's responsibility for the Odometer program to the Federal Trade Commission or the Department of Justice was raised. These Federal entities have existing law-enforcement and consumer protection programs that are more in line with the mission and activities of the Odometer program than NHTSA. The issue was also discussed at meetings between the Department and OMB. No discussions have taken place betweent he Office of the Secretary of Transportation and either the Federal Trade Commission or the Department of Justice on this issue.

Mr. CARR. Well, you have some people currently performing this job, right?

Mr. HART. There is presently a program under way and we are about to embark on a study to determine to what extent we should be doing what we should be doing, how we should be doing, that sort of question.

## ODOMETER FRAUD STAFFING

Mr. CARR. How many people are engaged in this odometer fraud activity?

Mr. BOEHLY. Seven.

Mr. HART. Mr. Boehly.

Mr. BOEHLY. Seven people, Mr. Carr, yes, sir.

Mr. CARR. Well, I have not had a chance to personally chat with Chairman Dingell about this. If this is something that really should be over at the Federal Trade Commission or at Justice, why do we not engage in a dialogue with Chairman Dingell, or Chairman Brooks?

I happen to be the vice chair of the Commerce, Justice, State Department and Judiciary Subcommittee. Perhaps, in our deliberations there we can move this function to the Justice Department or the Federal Trade Commission. I think we are all interested in reinventing government, and to the extent that makes sense, roles and missions should be clearly defined.

I do believe, and in this instance I speak for Chairman Dingell, that this is a very important area. It might not be an important safety area, but it is important nonetheless and should not, by virtue of its perhaps being misplaced, fall between the cracks. There is criminal activity in this area and we ought to get after it.

So perhaps you can check around the President's Cabinet table and see who wants this lonely orphan. Through some discussion between the authorizers and the appropriators and yourself, perhaps we can find these seven people a happy home.

Ms. STOLL. Let me get back to you with where that conversation is. It has started and we have had a number of conversations in the Department at the senior management level about this, but let me get back to you. I think you are right, we have to straighten it out.

### AUTOMOBILE CONTENT LABELLING

Mr. CARR. And let's be a little more generic. This particular issue came to my attention because of Chairman Dingell. He shared the letter with me that he had sent to the Secretary. You might put on that list not only the odometer fraud folks, but any other units of the Department of Transportation which seem illogically placed and we can have a broader conversation about where they ought to be.

Perhaps coordinating between the appropriations Subcommittees and authorizing Committees, we can accomplish some of the reinventing government goals without having to wait years to get it done.

As you know, a few years ago, I authored a bill along with Senator Mikulski, which required automobile manufacturers to label the domestic and foreign content of new vehicles, and that law becomes effective this year: We will not have another opportunity to visit with you in an appropriations hearing about that. The problem is that NHTSA is supposed to issue a final rule so that the auto makers could comply with the law, and that final rule has not been forthcoming yet.

When do you expect to issue it?

Mr. HART. We are certainly aware of the time pinch, but the issues involved in this matter were very complex and there was quite a short time frame specified for implementation. Given that our average rulemaking time frame is just something over 20 months and we only had 24 months from the time the statute was enacted to the time it was to become effective, there has been quite a time pinch on it.

But we are currently drafting the final rule. We are expecting that out shortly, after the appropriate review within Department and other OMB and other reviews. I cannot give you a specific date, but it is in final process right now and we are acutely aware of the importance of it and the need for doing all we can to move it expeditiously.

I don't know if Mr. Felrice would like to add anything to that.

Mr. FELRICE. I think you said it very well.

Mr. CARR. Well, it is indeed important. I know that the manufacturers are eager to comply, but, in fairness, they have to have a little time too. Compliance will require considerable work on their parts to catalog and define parts and make the printouts that are necessary to inform buyers of what kind of a vehicle they are buying.

Have you done any planning on how you plan to enforce the requirements.

Mr. HART. I will defer to Mr. Boehly.

Mr. BOEHLY. As the law becomes effective, Mr. Chairman, we will enforce it. Let me add to that, however, we recognize the time constraints that the industry is being placed under and we will certainly take that into consideration in terms of how we enforce this requirement. We do not expect to do any vigorous enforcement the first year until we have an opportunity to see how this program works and it gets into place.

Mr. FELRICE. If I can just add briefly, Mr. Chairman, one of the things that we are considering placing in the preamble to the final rule is the statement of the enforcement policy we may follow at least this first year. Other agencies have done that in rulemakings when there was short lead time and we are considering whether that is appropriate to do in this case also.

## AUTOMOBILE CONTENT LAW ENFORCEMENT

Mr. CARR. Are you meeting with the auto makers to assess their concerns about compliance and things like that? Have you met with them?

Mr. FELRICE. We have met with them in the past prior to the end of the recent comment period on the notice of proposed rulemaking. We have not met with anyone since that comment period ended, which I guess was sometime in January.

Mr. CARR. Well, perhaps you should have a meeting with them, if not on the content of the rule, then on how you plan to approach enforcement so that you can allay some of their concerns that they are going to have short deadline and then be held to rigid compliance the first year. I think what you said today is helpful, but it would probably be better that you convey your meaning to them directly rather than through the public record here.

The intent of the law was to measure the domestic content of parts, not the domestic content of labor. This was the issue over the assembly of parts. And while the final assembly of a vehicle is value added, it is hard to drive all those parts unless they are tied together. The fact is that assembly is only about 4 percent of the cost of a vehicle.

The law expressly excludes costs related to advertising, assembly labor, interest payments, overhead and profit into the calculation of domestic content. What is the justification in the proposal you made for the definition of "point of assembly" which seems to permit a manufacturer to move a portion of labor and overhead and profits into the domestic content calculation?

Mr. FELRICE. Well, we did not intend to do that. We have gotten back some strong comments on where exactly the final assembly of a vehicle occurs and it seems to occur at different points for different manufacturers. In our final rule, we will address the concerns expressed to us, but I guess I will say one of the things we are wrestling with is the different assembly and manufacturing practices of the different companies, almost each of which wants us to end the point at which final assembly occurs at a different point in the process and we are trying to find something that is generic or fairly generic to all manufacturers. But we will be addressing that very point. We did not intend to allow that to happen.

Mr. CARR. Apropos of our discussion about odometers, I suppose one could say that content labeling has nothing to do with safety. Is this beginning to be an orphan, too?

Mr. HART. Our present plans are to put the rule in place and enforce it appropriately. So we do not see it that way at this point. There are other things now within the agency that would not fit within the safety description, too, so I don't see that this one will befall that fate.

### FEDERAL LEAD AGENCIES ON AUTOMOBILE ISSUES

Mr. CARR. You know, I just make this as a rhetorical comment. I don't want to overdo the odometer issue. But it would seem to me, and this is a suggestion through the public record to our friends on the authorization committees, that, really, your agency's name should be changed to be the National Highway Traffic and Safety Administration.

It is clear, whether you really think of yourself this way or not, that you and EPA are the lead agencies in all matters that deal with the automobile industry, and NHTSA is probably—though it may not seem neat and tidy—as good a place to keep it these functions, if for only the reason that the knowledge that you develop about the manufacturing of a motor vehicle and its design and all of its elements is reposed within your agency.

Frankly, I don't think enough of this expertise is reposed in EPA; it is reposed in your agency. When regulations relate to the manufacturing processes of automobiles, it would seem to me that the responsibility for these functions needs to be where there is knowledge about how manufacturing takes place rather than in some other branch of government that may only have a snippet of jurisdiction over something relating to automobile manufacturing and the integrity of the automobile once it is built.

That is not really a question, but more a comment. We ought to slightly broaden what your agency is about and put the word "and" in there so that you primarily deal with safety but that you deal with other things as well.

### DRIVER EDUCATION REPORT TO CONGRES

We asked you for a study by March 1st on driver education. You are a little behind the deadline. Can you tell us the status of that study? Can we expect the study fairly soon?

Mr. HART. That is what I was referring to in mentioning that we are aware that we are slightly behind the deadline but we want to look at the issue of driver's education as it fits within the total framework of the scenario as we see it, which is to say many States have provisional licensing statutes. We want to look at how education fits with the legislation in the total scheme of knowledge, skills, judgment kinds of scenarios that we are looking at and looking at what is the most effective way to make all those pieces fit.

So with my just coming on board and our administrator to be coming on sooner rather than later, we hope, we have taken a broader view of that issue because we are very concerned about the historic lack of correlation between driver education and safety, and we are trying to find a way to attack that problem and do things that are more effective.

Mr. CARR. Well, no one is more knowledgeable about the delay in the appointment of leadership in this agency than I am, and we want to recognize that in the deadlines that the Committee has imposed on the agency. But, I am looking for another target date. I think your answer is a good one. It is just I am looking for another commitment.

Mr. WOLF. May 1?

Mr. HART. I am reluctant to say a specific date. I can just say we are trying to do it as soon as possible and I am not necessarily suggesting we would like to wait until our Administrator is formally on board. Initially, that might have been good, but it looks more likely that that report will probably come before he is on board the way things are going.

Mr. CARR. Well, let's handle it this way, when you get back and talk it over, tell us by telephone when we are going to get this report——

Mr. HART. Okay, we will be glad to do that.

### NEW CAR ASSESSMENT PROGRAM FORMAT

Mr. CARR. I would like to discuss the NCAP program. For those of you who are watching the clock, we will have a few questions on NCAP and a few questions on on-board vapor recovery. I have to have my chance to needle the EPA, and then we should be done in about 20 minutes, I would say.

Last year, NHTSA changed the format of the NCAP press release to a five star rating system to make, supposedly, NCAP more user friendly. Can you step us through what levels of protection are afforded at what star level so that we have that on the record?

Mr. HART. I will give you a generic statement and then will refer to Mr. Felrice for more details.

As you know, the program historically provided just numbers to consumers. So you would look at HIC number 865. Okay, so what did that mean. So the whole idea was that the information was not useful that we are trying to get to the consumer so they can have an idea of how safe their car is relative to other cars in the same weight class. And it was not just because it was just a number but because it was separated into categories, into head impact and then also chest impact.

So we were looking for a way to amalgamate those numbers into something that would be more useful for the consumer, and that is how we went into the star program.

Now, in terms of the specifics and how it works and the weight classes and things like that, I will defer to Mr. Felrice.

Mr. FELRICE. What we did, Mr. Chairman, was relate those numbers that Mr. Hart mentioned to a probability of serious injury. And we used existing curves in the literature to do that. So, for example, a head injury number of a thousand correlates to about a 15 to 20 percent chance of serious injury. Similarly, chest acceleration of 60 has the same probability of serious injury.

So we went to those curves, and then what we did was combine the head and chest numbers. We did a statistical averaging of the two and we got a combined probability of serious injury. But it was based on the individual head and chest numbers for each seating position. Then we allocated stars to those probabilities of injury. If the probability is less than 10 percent, you get five stars; between 10 and 20, two; 20 and 35 percent you get three stars; 35 to 45 percent you get four stars; and if you build a vehicle that complies with our safety standards, you get one star; that is, the probability is over 45 percent.

Mr. HART. I will add to that he did not mention there is a breakdown by weight classification. You might want to go into that in more detail as well.

Mr. FELRICE. It is very important that consumers only compare these ratings within a given weight class. That is the way we present all the data. We have been saying that for years. Consumers should not assume that a very small, light vehicle with five stars is somehow safer in the real world than a heavier vehicle that, for example, has four stars, because our test represents a vehicle hitting another vehicle of equivalent size.

You cannot use the data in situations where there are two unequal weight vehicles hitting each other and, generally, I think, as most people know, the heavier, the longer the vehicle, the safer it is. So the comparative ratings are only for vehicles within about a 500-pound weight class.

## NCAP SAFETY PERFORMANCE RESULTS

Mr. CARR. The February 28th NCAP release showed results for 34 passenger cars, but only two scores were less than three stars. Does that mean there is relatively little difference in the safety performance of most cars?

Mr. FELRICE. I think we are getting to a crossroads in this program, Mr. Chairman. And we are glad to see that in a way. We think this program, among other things, including consumer demand, has led to safer vehicles. We heard that discussion earlier as it relates to casualty data.

But we are at the point where, particularly with passenger cars, most of the vehicles are in this five and four star rating category. Since the purpose of the program is to provide relative comparative information, if all the vehicles ranked the same, then we are not providing comparative information to consumers.

As a result, we asked the public in early January to give us some guidance on the future of this program. What we said is, we are considering holding a public meeting on the future of NCAP and we mentioned the very point that you did, that the ratings are kind of lumping together now and should we do something different? Should we have different tests, different injury criteria, different speeds?

And the comments to that just came in last week and we are analyzing them now to determine whether we should hold a public meeting which would get to the future of this program.

Mr. CARR. Well, I suppose there are some who get angry at their teacher and want everything graded on a curve; right?

Mr. FELRICE. Sure.

## NCAP RESULTS FOR AIR BAG VEHICLES

Mr. CARR. One of the things that is apparent from your February release is that the results apparently do not show consistently higher safety ratings for passenger cars equipped with air bags. For example, the Hyundai Excel received five stars for the passenger with only belt protection whereas the Honda Civic received four stars for the passenger with both air bag and seat belt protection.

Does this tell us anything about the safety of air bags versus seat belts?

Mr. FELRICE. Not directly. I guess there are two factors at work here. One is this program is really rating the total protective capability of the vehicle, and it is not rating simply the restraint in the vehicle; that is, whether there is an air bag or an automatic belt or a manual belt. It is rating how the front end structure of the vehicle performs, how the steering column performs, whether the instrument panel moves rearward in the crash, whether the floor pan buckles. So it is a total system test of the vehicle and certainly an important part of that is whether you have a belt or air bag.

But, in essence, you can have a well performing structural vehicle with belt systems that, at least in this test, performs as well as a vehicle that perhaps does not manage the energy as well but has an air bag to compensate for it.

I guess the other thing I would mention here is people have suggested in this program that perhaps the injury criteria we use, head acceleration and chest acceleration, may not be the only or the best injury criteria to measure the performance of an air bag; that we should use the Hybrid III dummy to measure chest deflection. If we did that, it might show air bags would have much lower chest deflections than belt systems placed on the dummy.

## NCAP USE OF HYBRID III DUMMIES

Mr. CARR. Well, since you mentioned the Hybrid III test dummy, let's talk about that.

Mr. HART. I will add one point to that that is important about what Mr. Felrice said. He said it is a total system equation and that is why we have tried to stress that all bets are off if the belts are not buckled. It is important for the consumers to have their belt on for that information to mean anything.

Mr. CARR. For 1994 and 1995 model years, the Hybrid II or Hybrid III test dummies can be used for NCAP tests depending on certain criteria. Have you had any response to that flexibility from the automobile manufacturers?

Mr. FELRICE. Yes, we have. It has been somewhat mixed. It is one of these situations where we would never be able to please all the manufacturers. I think for the most part, the industry, domestic and foreign, is pleased with sort of the compromise position we came up with, that is, we would test all air bag seating positions with the Hybrid III dummy and only allow the Hybrid II for those positions that have only a manual belt or an automatic belt.

There are still some foreign manufacturers that wrote to us after we announced that decision that thought it was not fair; that we did not provide enough advance notice that we were going to test all the air bag positions with the Hybrid III as compared to the past where we asked them which dummy they preferred. But, again, I would say for the most part, I think the industry is pleased with the compromise.

Mr. CARR. And has the notification that a particular number reflects the use of the Hybrid II test dummy? Did you work that out all right?

Mr. FELRICE. Yes, I think so. It is in the news releases. I am not aware of any feedback one way or the other in terms of complaints or praise that that information is in there, but we have presented it.

Mr. CARR. What portion of NCAP tests for model year 1994 will be using the Hybrid III?

Mr. FELRICE. Almost all. I think we were going to test 39 vehicles, so 78 seating positions, and I think 73 of those would have the Hybrid III used.

## SIDE IMPACT TESTING

Mr. CARR. The fiscal year 1995 budget includes $620,000 to incorporate side impact testing into the NCAP program in addition to the frontal crash test. The additional cost of the side impact testing would increase annual NCAP costs by one-third.

Now, considering that your overall budget request has no growth, why should we start a new NCAP initiative with significant cost when other existing programs are being cut below 1994 levels?

Mr. HART. The idea in general was to again provide consumers the information that is helpful to them in determining the relative safety of their vehicle. Frontal, side, and rollover are the three independent modes that together are 90 plus percent of all fatalities, and we are trying to be as complete around that pie as we can. For more specifics, though, I will again defer to Mr. Felrice.

Mr. FELRICE. As a result of focus groups we conducted last spring and summer, consumers told us they wanted additional safety information. We asked them what they thought of NCAP or what type safety information they desired and how they desired it to be given to them. One of the things that came out over and over is that the frontal information we provide is fine, but it is not enough. They want to know how that vehicle performed in side crashes, how frequently it rolled over, et cetera.

So we were responding to that sort of consumer directive that we had to provide additional safety information.

Mr. CARR. Well, I am still a little curious. For example, research on vehicle safety systems would be cut by a million dollars, biomechanics by $800,000, highway traffic injury studies by $300,000, and the National Accident Sampling System, which we talked about earlier, by a million dollars. Those are a lot of cuts. And you are telling me that the consumers called you up and said, well, we want more side impacts tests; we don't care about these other things, we just want more side impacts tests?

Mr. FELRICE. Well, that is not quite it in so many words. I mean, certainly in preparing a budget, there are hard choices, but what we see now is great consumer interest in safety, whether it is air bags or anti-lock brakes or whatever. We see manufacturers advertising safety, including some more esoteric items such as meeting side impact standards that do not take full effect until 1998.

We wanted to join into this interest by having an educated consumer that has as much safety information about a new vehicle as possible. For most people, it is their second largest purchase in their life. We think providing this information can lead to increased safety. We believe the program, the frontal program, has encouraged manufacturers to provide additional safety beyond our regulations and we think it is a very effective way of letting the marketplace improve safety instead of waiting for the regulatory approach.

### HIGHER NCAP SIDE TEST SPEED

Mr. CARR. Well, we will see. I appreciate your answer.

Since the side impact NCAP test would involve a higher test speed of about 38 miles per hour than the new side impact compliance standard, several manufacturers have suggested that this is, in effect, setting a new higher standard than the manufacturers must meet at the same time the industry must meet the new side impact compliance standard.

Do you see any inconsistency there?

Mr. HART. We could not use the side test compliance speed as the NCAP speed because the cars have to meet that. We wanted to provide information to the consumers on relative safety of the vehicles, and in order to do that, by definition, it has to be a higher speed than the compliance speed. But let me again defer.

Mr. CARR. What is the reason for the higher speed?

Mr. HART. Again, the compliance speed, they have to meet that in order to be on the road in the first place. So that would not be a useful speed. So we have to go to a higher speed to give relative information.

Mr. CARR. Why is it not a useful speed?

Mr. HART. By definition, everybody has to meet that test in order to be on the road.

Mr. CARR. So, good.

Mr. HART. Mr. Felrice is ready to chime in.

Mr. FELRICE. The goal of this program is to provide comparative information and we feel if we just provided the compliance information, all the vehicles would be grouped together.

Mr. CARR. Great.

Mr. FELRICE. We would find ourselves in a situation we are starting to find ourselves in NCAP and frontal crashes, where the test does not distinguish among vehicles; that everybody is sort of the same.

Mr. CARR. Well, the law says they ought to be the same, 35 miles per hour. Isn't that right?

Mr. HART. No, actually the law provides for minimum standards, the law does not say they should all be the same. It provides for minimum standards. Our idea is to let consumers buy what they think is the safest, if they want to.

Mr. CARR. Why not 42 miles an hour?

Mr. FELRICE. Obviously, the speed we picked is somewhat arbitrary but it is a speed at which we start to see differences, a speed at which consumers can distinguish by how much manufacturers and specific vehicles exceed our minimum standards. We could have picked a higher speed, we could have picked 35 miles an hour. We believe this speed is meaningful, and represents a large portion of serious side impact crashes and it does start to spread out the vehicles so that you can see differences among vehicles.

Mr. CARR. Well, I personally have a serious problem with that. There is a standard and now it seems to me that the agency under the guise of being helpful to the consumer is trying to set another standard.

Mr. FELRICE. But the motor vehicle———

Mr. CARR. You get to the point where everybody then has to do a 38 mile per hour test. Then, those tests will all be indistinguishable because everybody will be passing that test and then, somewhere in the agency, somebody will say, well, let's make it 40 miles an hour just so we get this spread.

We have this urge to show people that there are differences in the safety of automobiles. Your urge to show differences in the safety of automobiles gets ahead of what the Congress and the people of the country have asked you to do.

Mr. FELRICE. But the Motor Vehicle Information and Cost Savings Act does require us to provide crash-worthiness information to consumers. We have chosen this program as the means of complying with that statutory mandate. In terms of whether this is really a higher standard, I think that is only the case if manufacturers design their vehicles to do well in the test and I think they would only do that if consumers pay attention to the information.

So we sort of have this big circle here where consumers seem to be interested in this, seem to want the information, manufacturers are responding to consumers rather than to the government in this case.

Mr. CARR. But, you are trying to drive a result that there are differences between manufacturers and/or models of cars and the law does not ask you to do that.

Mr. HART. Well, the law asks us——

Mr. CARR. The law asks you to assure compliance with the standards that have been set by the law. This is a compliance test, not a let's see who can getcha somewhere later on test. This is a compliance test. The law says 35 miles an hour. If they all comply, then, guess what, you do not need as many tests. You do not need to spend as much money.

You are all wonderful people, and I enjoy working with you, but I just have a serious problem on this one because it seems to me that this is an example of what all bureaucracies, including the Congress and maybe this Committee, do. We like to interpret things in a way to make us more important and to allow us to spend more money. And it seems to me that this one is where you are real vulnerable.

Your job is to assure compliance and to make sure that the tests that the auto makers have are in fact reflective of what the law requires. I don't think your job is to set a new standard just to see, very interestingly, which manufacturers make it or not. I think you are vulnerable on this.

And, correspondingly, if the cars are supposed to meet a 35-mile-per-hour standard, and they all do otherwise, they would not be on the road. Then, you will still need tests to actually make sure that some do not leak through, or that the testing is flawed. But with three more miles per hour, you are just putting an overlay on something that is not required and, just coincidently, involves more tests and keeps more people doing more things. At the same time, we are cutting these other very valuable programs by a million here, $800,000 there, $300,000 there, and a million there. It seems to me that this is in the nature of making work that we do not need to do. If we had everything else covered and there were all kinds of other things to do, I would think perhaps this would be interesting. But, I just do not think you need to do this.

But I am only one Member here. So, let's go on to another one.

Mr. FELRICE. Mr. Chairman, may I say just one quick thing on that? I certainly agree with you, with everything you said in terms of the National Traffic and Motor Vehicle Safety Act, but what we have here are two different statutes enacted for different purposes. The NCAP program is being operated under the mandate of the Motor Vehicle Information and Cost Savings Act which says we must provide comparative crashworthiness information to consumers. And I guess since 1979 the agency has chosen this narrow test or a test like this to meet that statutory edict and perhaps the two are in conflict.

## ON-BOARD VAPOR RECOVERY SYSTEMS

Mr. CARR. Well, regardless of what I thought, I would be right behind you if that law said "And to make sure that consumers have comparative information on crash tests in excess of what is actually required." Then it would be something the Congress had asked you to do. I think you are inventing something here and inventing something that causes us to spend more money while we are cutting other necessary programs.

Well, let me end on a positive note, because you have really been great over the years about on-board vapor recovery. I want to applaud the agency for its leadership here. We had this same discussion with the folks at the Federal Highway Administration the other day. It turns out that the Federal Highway Administration is, for most purposes and almost always, in charge of the federal-aid highway program except when the EPA wants to run it using some criteria.

It seems to me you are involved and you are in charge of overall vehicle safety except when the EPA decides that the environment is more important than the safety of passengers. This is one where I would like to help you.

I know that Chairman Dingell probably would like to help you as well. I think it is just, frankly, outrageous that EPA has been able to put what they regard as clean air problems in some parts of the country ahead of the safety of people.

What were the results of the safety analysis that NTTSA produced—An Assessment of On-board Refueling Vapor Recovery Systems Safety—dated November 1993. Can you briefly summarize the report?

Mr. HART. As you have obviously intimated, we are very concerned about the safety problems associated with that and our conclusion was that there was still a small increase in the safety risk. We could not quantify it but we are concerned that there is still an unquantifiable, albeit small, increase in the safety risk of having these devices. Again I will defer to Mr. Felrice.

Mr. FELRICE. We reexamined this whole issue since our report of I guess 1991 on the subject and what we concluded, since that time there have been certain EPA actions, certain rulemakings that have lessened our safety concerns. There has been some advancement in the technology that would be used for these containers and hoses and valves to recapture these refueling vapors and all of that led to a decrease in our safety concerns.

At the same time, as Mr. Hart mentioned, we said flat out that we still think there are negative safety effects associated with onboard refueling vapor recovery systems. We could not quantify it. We thought the effect was small but we stated very clearly we still thought the effect was negative.

## VAPOR RECOVERY ON LIGHT/HEAVY VEHICLES

Mr. CARR. The report notes also that EPA is really not under a court order to have these standards in place for light-duty trucks and heavy-duty vehicles and vehicles powered by fuels other than gasoline.

Can you comment on EPA's decision to require light-duty trucks and heavy-duty vehicles to be fitted with on-board refueling vapor recovery systems after 1991?

Mr. FELRICE. I probably can't. As you stated, we expressed our view that the law did not require ORVR systems on other than passenger cars. We stated our concern that all the development work to date has been only on passenger cars and certainly for some light-duty trucks and vans there are significant differences in the fuel system such that different technology might have to be developed and we said that we would certainly like to see prototypes and fleet studies before such requirements were mandated for those vehicles.

EPA, I guess, on the other hand, seized the moment here and thought it appropriate to regulate those vehicles, but I guess I would say we were pleased that they at least provided additional lead time, an additional three years. Hopefully, that will allow us to gather information on passenger cars, as to how they actually work, with regard to safety and allow additional time for prototype development for light trucks and vans.

Mr. CARR. Well, I want to reiterate that I think you have been really great in articulating these safety issues. This is a problem that Congress created and, in my judgment, jumping through a confused regulatory environment, EPA has been only too happy to replace the safety of automobiles in favor of what cherished interest they seek to protect.

I, frankly, do not think it is a very good compromise. I believe that Congress should work vigorously in the coming months and years ahead to try to sort that out. It seems to me inconceivable to put the interest of clean air above the safety of passengers in vehicles.

We are all interested in clean air, but there are so many ways we can help solve that problem. There are so many alternative ways of dealing with that and, of course, one of the alternatives is to require vapor recovery at the pump.

So, it is not really a compromise between clean air and the safety of motor vehicle occupants. It just turns out that some interests won out and it wasn't the safety of the motoring public.

Mr. Wolf has a couple of additional questions.

### SECTION 410 FUNDING LEVEL

Mr. WOLF. Thank you, Mr. Chairman.

Last week, the people from Mothers Against Drunk Driving came by, MADD, and they raised a question which I agreed to ask.

As you note in your budget justification funding for Section 410, the alcohol-impaired driving countermeasures grant program is requested at the fully authorized level, $25 million. You further note that approximately 30 States are expected to qualify in fiscal year 1994. To qualify for these grants, States must adopt several laws to combat drunk driving.

Now there are really several questions. Is the authorized level of $25 million adequate to cover the entire amount in basic and supplemental grants for what is the estimated 30 successful states that will qualify in fiscal year 1994? If not, what total would be required to cover the states' performance under this grant program?

Now, MADD was inferring it was roughly $36 million.

Mr. HART. Mr. Wolf, I will defer to Ms. Derby on that question.

Ms. DERBY. What the criteria says is that a State is entitled to a maximum of 30 percent of their 1992 402 appropriation if they meet the basic criteria, and then for an additional 35 percent dependent on whether they meet up to seven additional criteria.

If you multiply that out, we do not have sufficient funding and have not had, not this year nor the year before, to fund the States fully. If we were to fund them fully under that formula, it would take just about $36 million to do that.

Mr. WOLF. The other question that they ask, are you concerned it is really a disincentive for the states to take action; kind of the belief that they will qualify for the federal incentive grants only to find out the money is not there?

Ms. DERBY. Well, right now the States are operating knowing how much money or approximately how much money they are entitled to, since we have an amount that is appropriated to us and we tell them at the front of the year will be approximately their share. So they go into it knowing what the amount is.

Mr. WOLF. You reach a point of diminishing effectiveness because the amount will drop. Your authorized level is $25 million. You have 30 some states that are qualified now. What if all 50 become qualified?

Ms. DERBY. Then they would get less because when you only have a certain amount and it gets shared out. Certainly it would be less and it would be less significant to the States.

### SECTION 410 FUNDING AUTHORIZATION

Mr. WOLF. So are you going to ask your authorizers to increase that amount?

Mr. HART. I don't know what our specific plans are in that regard. You are talking about in this 1995, or in the future?

Mr. WOLF. Well, both, really.

Ms. DERBY. I was going to say an incentive is an incentive. The States are given this incentive in terms of the money we have to move ahead with legislation. And we have found that it has been effective; that the incentive has been adequate for State-elected bodies across the country to go in for new legislation.

Mr. WOLF. So you do not really think there is a need to go above the $25 million authorization?

Ms. DERBY. I think that alcohol is a critical area and——

Mr. WOLF. I do, too.

Ms. DERBY [continuing]. And as much as we could put in, it would be beneficial for the program.

Mr. HART. There are few programs we would not like to ask for more in better times, and that is certainly one of them, but, again, we have to make difficult budget choices and this is one of the choices that we made. I guess we have to keep our eye to the real world experience and see to what extent does the inclusion of more States operate as a disincentive for the existing States.

Mr. WOLF. If you have 30 States in it now, that means there are 20 more left, and if MADD is right, and you verified their figures, it would take $36 million to fully reward the qualifying States.

I think you are beginning to have a problem and I think it ought to be looked at, so I would like you to look at that and get back to us, if you could.

[The information follows:]

The agency will look into this issue of the authorizing level and the extent to which the inclusion of more states in the section 410 is a disincentive to other states.

## MOTOR VEHICLE TITLING REPORT TO CONGRESS

Mr. WOLF. The other question is on the anti-car theft task force. That statute required the task force to report to the President and the executive officers of each State one year after the appointment of the task force. What is the status of that?

Mr. HART. I think on that you are referring to the motor vehicle titling——

Mr. WOLF. Motor Vehicle Theft Act of 1992.

Mr. HART. Precisely. And what was created, the Motor Vehicle Titling Registration and Salvage Advisory Committee, is the committee you are referring to. I will refer to Mr. Boehly. The report has been completed.

Mr. BOEHLY. Thank you, Chris.

Mr. Wolf, as the Acting Administrator points out, that report has been completed. It has been sent, in accordance with statutory direction, to the President and the Congress and the Governors of each State.

Mr. WOLF. When all these reports come out, do you send it to the Appropriations Committee? Did we get a copy, for instance? I don't know the answer.

Mr. BOEHLY. I am not certain but if you did not, we will certainly get you one, sir.

Mr. WOLF. I think it would be helpful as a courtesy or a tradition that could be started, that when these reports come out, because certainly the Committee that appropriates is interested in these, and if you do something we are not interested in, it is not going to harm us just to have it here.

I will suggest to the Chairman that all the different agencies send them up to the Committee.

Mr. HART. I thought we did that as a matter of course, but I will look into it.

### REAR GUARD RULEMAKING ON TRUCKS

Mr. WOLF. The last question is the truck safety rulemaking on the rear guards. Where are we on that?

Mr. HART. I believe we have put out a rule on that, too. I will ask Mr. Felrice to give more details.

Mr. FELRICE. We have a proposal out. There was a report submitted to the Congress. If you have not gotten one, we will make sure you do.

Mr. WOLF. If we could get that.

Mr. FELRICE. I think in late summer. We expect to issue a final rule on that subject within the next few months.

Mr. WOLF. What does it say? What do you do?

Mr. FELRICE. I think, as we stated in the report, the rule would probably look fairly much as we had proposed. It would require a dimensional requirement for rear guards on trailers. It would require a minimum strength requirement so that they could absorb energy; that they not be too rigid and act as a wall; that they yield slowly to protect the occupants in the striking vehicle as well as to prevent the actual underride, in which the occupant compartment of the vehicle is damaged by the rear of the truck.

We had some concerns from some of the commenters to the NPRM that what we proposed will not work well, it was too weak, that small vehicles would underride the guards, that air bags would not deploy properly, there would be too much underride and by the time the vehicle would slow down it would be too late to adequately deploy the air bag and protect the occupant.

As a result, we conducted a series of about eight vehicle tests in which we ran air bag vehicles with test dummies into the rear of trailers that met our proposed requirement, and in every case underride was prevented. We did not see a small subcompact going underneath a guard and in every case the air bags adequately protected the dummies.

Mr. WOLF. How many lives do you think that would save, per year, based on how many accident deaths there are?

Mr. FELRICE. I think there are about 500 or 600 deaths a year in which cars or light trucks and vans smash into the rears of trailers. But of those, we think only about 60 deaths a year actually involve underride, and we think that the rule would save at least a third of those. So we are talking about 20 or 30 lives a year.

Mr. WOLF. What is the cost per truck, roughly?

Mr. FELRICE. I think it was under $100 per trailer.

Mr. WOLF. Does the American Trucking Associations support this?

Mr. FELRICE. I don't think we had any real objections to this requirement. Some of the trailer manufacturers are concerned. Many of those are small businesses and they are worried about the cost to them. They may only produce five trailers a year. But we have tried to structure the rule to make it an equipment rule so that the manufacturer of the guard is the entity that has to certify compliance, not the actual manufacturer of the trailer.

### TRUCK SPLASH AND SPRAY

Mr. WOLF. What about spraying by large trucks? Have you looked at that and where are you on that?

Mr. FELRICE. With regard to your guidance in the committee report, we did submit a report, but I think it was only last week that it was submitted, and in there we have looked at the situation since we terminated rulemaking on this subject in the late 1980s and we essentially reached the same conclusion, that we think it is a relatively small problem; all of the data sources that we examined showed that splash and spray, at most, might be a contributing causal element in about one-one hundredth of a percent of crashes. To us, it seems to be more of a momentary nuisance than an actual safety problem.

On the other side of it, we cannot find anything that works. We went out for public comments before we produced this report and we had six or seven commenters and most said that splash and spray is really a function of the speed of the vehicle and it can be somewhat lessened by these aerodynamic devices on the top of tractors, but nobody presented any information that any kind of side guard or skirt would really reduce splash and spray in a large portion of the situations in which it occurs.

### EFFECTIVENESS OF FOREIGN TRAFFIC SAFETY

Mr. WOLF. I guess the last question is for all the questions that I asked and all the things you looked at, do you automatically look and see what they are doing in Germany or what they are doing in Japan or what they are doing in other countries that are comparable, if you will, to see what is working and what is not working? Is that automatically done?

Mr. HART. We trade notes extensively with quite a few foreign countries, not only for that purpose but also for purposes of facilitating trade, i.e. the sale of vehicles across borders. So we are very active in looking at comparative studies, alcohol studies on death, running lights is an issue now, for example. We looked at that in other countries.

We compare notes extensively and have international conferences that include numerous countries. We do it with several points in mind. Again, one is to try to take advantage of each other's learning but also to try to facilitate commerce.

Mr. WOLF. Do they pick up more from us or do we get more from them?

Mr. HART. I think it is a two-way street, but we have an Office of International Harmonization, whose function is specifically to deal with that point.

Mr. WOLF. Sounds like a singing group.

Mr. HART. I have never asked them to do that but.

Mr. WOLF. What do they do? They are looking at other countries?

Mr. HART. They trade notes with all the other countries and, for example, in establishing standards, we want to make sure that standards are not used as trade barriers, so that is one of the examples of what the function is.

Mr. Parker, though, can expand on that.

Mr. PARKER. Yes, with regard to standards for the future, because the domestic industry is more interested in exports these days, we are working with the foreign governments and with foreign industry to try to coordinate our research efforts and maybe harmonize our regulations ahead of time, so it is not a trade barrier so you do not have a delay in being able to export vehicles to other countries.

## MEXICAN TRUCK SAFETY UNDER NAFTA

Mr. WOLF. And are you looking with regard to Mexico? What are you doing with regard to Mexico now that NAFTA, which I supported, passed? What are you looking at with regard to that and the trucks coming up from Mexico? Do you see much problem?

Mr. PARKER. I think that is something that this agency is just getting involved with. We have not really had that many contacts with Mexico in the past. We have had a lot more with Canada. Canada has a fairly active highway safety, motor vehicle safety and motor vehicle safety research program and we have done a lot of things jointly with Canada. But with Mexico, just starting, I know with regard to NAFTA and the harmonization of regulations, that there are negotiations and discussions starting to make sure that there are not safety problems for those vehicles coming into this country.

Mr. WOLF. Will you be involved in that?

Mr. HART. We are actively involved in that through that same office I mentioned.

Mr. WOLF. I have ridden on a couple of buses in Mexico that I know could not make it around here and I am wondering if you are looking at the buses and the trucks, because in several years there will be complete cross-border traffic. Do you have any sense of where Mexico fits in with regard to truck safety and bus safety versus the United States?

Mr. HART. In terms of coming across the borders?

Mr. WOLF. Well, no, I mean the general overall safety of trucks and buses in Mexico versus in the United States. Their standards and enforcement and things like that. Because after NAFTA is fully implemented, I understand we will see many more of them than we do now. Do you know how they stack up?

Mr. HART. I will ask Mr. Brownlee.

Mr. BROWNLEE. We are serving as an intermediary between the Federal Highway Administration and the law enforcement community to understand what the patterns of flow will be when NAFTA becomes a reality along the border States adjacent to Mexico. It is to better understand what those enforcement implications are as it relates to commercial truck traffic that might be increased as a consequence of NAFTA.

Mr. WOLF. But do you know how the Mexican Government now approaches safety regs for buses and trucks?

Mr. BROWNLEE. From a regulatory standpoint, I do not.

Mr. HART. I am afraid I do not either.

Mr. WOLF. And their safety record; does anyone know? This is something I think you might want to look at because eventually, in the next several years, it will be a major problem or a potential problem, and I don't know who else would look at it other than your agency in the Federal Government. Trade reps probably would not get involved in it.

Mr. PARKER. I believe our activities with the Mexican and Canadian Governments will get into that, and NHTSA will probably play a strong part of that.

IVHS has some applications for this also, which is weighing in-motion vehicles coming across the border. And there is a new activity to actually inspect the brake condition while the vehicle is in motion also without having to stop vehicles. So I think both those applications have some application to border crossings.

Ms. STOLL. Mr. Wolf, we have taken the initiative in this area. We are holding a summit meeting, the first to which representatives from Canada, Mexico and our own Department of Transportation and several other agencies will be meeting. It is within a month and we will be laying out the operational issues that we need to address and safety requirements is obviously high on them.

### TRUCK ENFORCEMENT IN NAFTA

Mr. WOLF. Will their trucks and buses have to meet our standards?

Ms. STOLL. In order to come to this country and travel on our roads, that is correct.

Mr. WOLF. We have a problem in certain areas in the United States with buses, do we not? I think we do. And having ridden on buses down in Mexico—I was down there one time and, boy, I was on a lot of different buses and I think there is going to be a major difference between our standards and theirs, so I think it will have to be considered—particularly tour groups coming over and things like that.

Mr. HART. You would know this better than I, Mr. Wolf, but I understand Federal Highways has asked for an increase in motor carrier funding to, among other things, look at that cross border traffic and their enforcement regarding that.

Mr. WOLF. I thank you very much and I have no further questions, Mr. Chairman.

### CRASH CUSHIONS

Mr. CARR. Thank you, Mr. Wolf. I was finished, but your questions prompt me to ask more of an informational question out of curiosity. A few years ago, I began to see huge square yellow things on the back of construction vehicles that flop down. I don't really know what they are for, but intuitively I said somebody sued somebody and got an enormous award for running into the back of a dump truck parked on the side of a road. Am I wrong? Do you know what I am talking about? Is this something required by your agency or FHWA, or is this something that road builders and highway departments are using to avoid liability? Do you know what I am talking about?

Mr. HART. I know what you are referring to and it is analogous to the way you see buckets of sand placed on forks of the road so that impact on the concrete divider will not be so severe. This is an impact to the rear of a construction-type vehicle. And I know what you are referring to, but I am not sure it is in our bailiwick. But it is basically for someone running into the back of that construction vehicle, they will have a relatively soft impact.

Mr. CARR. Well, you have plenty of work to do other than trying to satisfy my curiosity, but if you get back to your office and somebody knows a little more about that, please call us. I started seeing these weird-looking things and it took me a while to figure out what they were. I had not thought about it until Mr. Wolf started asking you about the impacts of cars at the rear of trailers.

Mr. HART. They may be the Federal Highway's bailiwick. At the National Transportation Safety Board, we were concerned about construction work zone safety. We saw a lot of people who did not slow down in the work zone. You usually see it on the first vehicle you would encounter.

And so I know it is a big issue but it is apparently not in our bailiwick. Mr. Parker.

Mr. PARKER. I would just add that we are working more closely with the Federal Highway Administration with regard to crashes of vehicles into roadside appurtenances in some of these areas too, and we do have a joint project with them to kind of expand our joint knowledge bases of those types of crashes. We know a lot about the vehicle and they know a lot about the roadside appurtenances and we are putting those together.

[Additional information follows:]

The barriers mounted at the rear of road construction vehicles at construction sites are called truck-mounted attenuators (TMA) or crash cushions. The use and performance of these mobile crash barriers are under the jurisdiction of the Federal Highway Administration's Associate Administrator for Safety and System Applications.

According to guidelines published by the American Association of State Highway Transportation Officials, TMA's are used for short term, mobile, and moving work zones. Their purpose is to prevent vehicle encroachment into the work site, and they may be mounted to the rear of a truck or a trailer.

Performance specifications and test procedures for TMA's are established by the National Cooperative Highway Research Program manual, NCHRP–50.

[Questions for the record follow:]

## SOCIETAL COSTS—MOTOR VEHICLE CRASHES

Mr. CARR. NHTSA estimates that motor vehicle crashes result in direct societal costs of $137.5 billion annually and that medical costs of motor vehicle injuries are over $14 billion annually. Please describe how NHTSA arrived at these estimates.

[The information follows:]

NHTSA's estimate of motor vehicle crash costs was developed from a comprehensive examination of injury data bases, cost surveys, earnings data and many other sources. Incidence estimates were developed primarily from the Fatal Accident Reporting System (FARS), the National Accident Sampling System (NASS), the General Estimates System (GES), the National Health Interview Survey (NHIS), and state police accident reports. The primary source of per-unit cost estimates was the report "The Costs of Highway Crashes" conducted by the Urban Institute with funding by the Federal Highway Administration and NHTSA.

The $137.5 billion cost represents 1990 experience. It results from 44,500 fatalities, 5.4 million non-fatal injuries, and 28 million damaged vehicles in both police reported and unreported crashes. About $46 billion of total costs was due to property damage and another $40 billion resulted from lost marketplace productivity. Medical costs totalled about $14 billion. Other costs included emergency services, vocational rehabilitation, lost household productivity, insurance administrative costs, legal and court costs, workplace costs, and travel delay. Alcohol involved crashes accounted for roughly one third of all crash costs.

A detailed description of the methods and results of this effort is included in the report "The Economic Cost of Motor Vehicle Crashes, 1990". This report is available from NHTSA's Office of Plans and Policy.

### SOCIETAL COSTS—DWI BELT CAMPAIGN

Mr. CARR. NHTSA also estimates that achievement of the Secretary's combined DWI/belt objectives in 1997 would save society $5.8 billion in direct costs per year, including $1.0 billion in annual health care costs. Please describe how NHTSA arrived at these savings.

[The information follows:]

These savings were described by NHTSA in "Saving Lives and Dollars: Highway Safety Contribution to Health Care Reform and Deficit Reduction", published September 1993. $5.8 billion in direct cost savings was calculated by estimating the number of fatalities and injuries that would be averted if belt usage increased from 62% in 1992 to 75% by 1997, and if the proportion of alcohol related fatalities were reduced to 43% of total fatalities. This improved level of restraint usage would result in saving 1,700 lives each year, at a cost of $693,800 per life, for $1.2 billion in savings. Improved restraint usage is also projected to save 41,100 AIS 1 injuries, at $3,100 per injury, and 47,200 AIS 2–5 injuries, at $48,100 per injury, for a total belt-related injury savings of $2.4 billion. The belt-related fatality and injury cost savings together total $3.6 billion. In addition, projected savings from reducing alcohol-related fatalities was calculated based on saving 1,200 lives annually, at a cost of $797,000 per fatality, and avoiding 65,000 alcohol-related injuries at all levels of severity, for a savings of $19,200 per injury. This sums to $2.2 billion in savings from reducing alcohol-related fatalities. Added together ($2.2 billion plus $3.6 billion), we achieve a net direct cost savings estimated to be $5.8 billion. Of this total, $1 billion is estimated for annual health care savings as follows: health care costs associated with each belt-related fatality is $3,700; for each AIS 2–5 injury $13,700, and for each AIS 1 injury $746. Multiplying these costs by the incidence nets a belt-related health care savings of $684 million. Health care costs for the 1,200 alcohol-related fatalities and associated injuries are estimated to be $235,500 each, or $283 million for alcohol-related fatalities alone. When added to the belted-related health care costs, a net projected savings of $966 million, rounded to $1 billion, results.

Unit values used in these calculations were based on data presented in Blincoe and Faigin, "The Economic Cost of Motor Vehicle Crashes, 1990", published in September, 1992.

### NCAP FORMAT EFFECTIVENESS

Mr. CARR. How will you evaluate the effectiveness of the new NCAP format, and what reaction have you received from consumers, vehicle manufacturers, researchers, and safety organizations?

[The information follows:]

The reactions from the media and consumers have been overwhelmingly positive. The vehicle manufacturers also were generally in favor of the new format. The agency believes that the best way to evaluate the effectiveness of the new NCAP format is by convening a public meeting and addressing comments on the issue in that forum.

### NCAP CONSUMER INFORMATION

Mr. CARR. How do consumers and others who want more detailed data on NCAP test scores learn that this information is available and how they may obtain it?

[The information follows:]

The NCAP press releases state that additional information on the crash test results can be obtained by calling the agency's toll-free Auto Safety Hotline. The numerical test results for each vehicle are still available and are being disseminated upon request. A new cover sheet has been created for the numerical test results that explains how to use them and provides other information concerning the program.

Mr. CARR. An article by George Hoffer published in *Applied Economics,* 1992, concluded that consumers find the government's crash data to be of little use, and that "the government's crash test data bear no significant relationship to observed vehicle safety records as reflected in actual bodily injury data." Please comment on the author's two principal findings.

[The information follows:]

Contrary to Mr. Hoffer's conclusions, the NCAP Congressional report, issued in December 1993, presented the documented results of the agency's media survey and focus group study that show a positive media and consumer interest and utility in crash test data. Another section of that same report refutes Mr. Hoffer's other "finding" regarding the relationship between NCAP results and actual on-the-road injury and fatality data. The agency study concludes that there is a significant correlation between NCAP results and real-world fatality risks for restrained drivers. More recently, the agency published a Technical Report titled *Correlation NCAP Performance with Fatality Risk in Actual Head-On Collisions.* This report substantiates the agency's position and presents detailed supporting evidence.

## NCAP EVALUATION

Mr. CARR. In December, NHTSA completed an evaluation of the New Car Assessment Program (NCAP) to assess how well NCAP crash test scores correlate with actual fatality risks in frontal crashes. Would you summarize your research findings?

[The information follows:]

Cars with good NCAP test scores have significantly lower driver fatality risk in actual crashes than cars with poor scores. There are statistically significant correlations between NCAP scores for head injury, chest acceleration and femur loading and the fatality risk of belted drivers in actual crashes.

When two passenger cars of equal mass collide head-on, the driver of the car with the better NCAP score has, on average, 20 to 25 percent lower risk of fatal injury than the other driver.

NCAP crash test performance scores have improved substantially in most cars since the test program was started in 1979. The fatality risk for belted drivers in actual head-on collisions in 1991 model cars decreased by 20 to 25 percent compared with model year 1979.

NCAP information creates market forces that motivate manufacturers to design cars with better NCAP scores. NHTSA's study shows that the cars with better scores have lower fatality risk *on the highway.*

Mr. CARR. Please comment on the study's findings that NCAP chest and leg injury scores appear to be better real-world predictors of fatalities than NCAP head injury scores.

[The information follows:]

NHTSA's study showed that any single NCAP parameter, including the Head Injury Criterion (HIC) could be used to partition cars into "good" and "poor" performance groups, where the "good" performance group had significantly lower fatality risk in actual crashes than the poor group. The study did not conclude that HIC was inferior to the other parameters as a predictor of actual fatality risk.

It is true that, on the principal accident data set used in the study, chest g's and femur load were somewhat better correlated with fatality risk than the Head Injury Criterion. However, on the more restricted alternative data set also used in the study, HIC and femur load had about equally strong correlation with fatality risk. The relative utility of the three parameters in predicting fatality risk cannot be definitively rank-ordered.

The reasons for the significant correlation between NCAP femur load and actual fatality risk are not completely understood at this time, since injuries to the lower extremities, by themselves, are generally not fatal. However, one reason femur load "works" is that the three NCAP parameters are not independent observations on isolated body regions. Cars with crashworthiness problems tend to have high scores on one or more parameters, but it is not always predictable which one. High femur load could reflect a more general problem affecting injury risk to other body regions in some crashes.

Mr. CARR. What additional changes is NHTSA considering in the NCAP program based on the results of your study correlating NCAP performance with fatality risk in actual head-on collisions?

[The information follows:]

The agency does not plan to change the NCAP because our study indicates a significant correlation exists between NCAP performance and fatality risk in actual head-on collisions. The agency published a Technical Report titled *Correlation of NCAP Performance with Fatality Risk in Actual Head-On Collisions.* This report substantiates the agency's position and presents detailed supporting evidence.

Mr. CARR. Please explain the scientific basis for the composite rating combining head and chest injury test scores used in the 1994 NCAP press release.

[The information follows:]

To develop a simplified NCAP data format, as requested by Congress in the fiscal year 1992 Senate report, the agency has used the injury risk functions shown in equations 1 and 2 below.

In the SAE Paper No. 851246, "The Position of the United States Delegation to the ISO Working Group 6 on the Use of Head Injury Criteria in the Automotive Environment", Priya Prasad and Harold Mertz (Ford Motor Company and General Motors Corporation) presented an injury risk function curve that relates the probability of an AIS≥4 head injury to the Head Injury Criteria. In a 1990 Stapp SAE Paper No. 902328, "Assessing the Safety of Occupant Restraint Systems", David Viano and Sudhakar Arepally (General Motors Corporation) expanded the application of this injury risk function curve and also provided the equations to directly calculate the probability of AIS≥4 injury to the head and chest. For head injury, the equation:

$$P_{head}=[1+\exp(5.02-0.00351\times HIC)]^{-1} \qquad (1)$$

relates the probability of an AIS 4 or greater injury to the Head Injury Criteria. For chest injury, the equation;

$$P_{chest}=[1+\exp(5.55-0.0693\times Chest\ G)]^{-1} \qquad (2)$$

relates the probability of an AIS 4 or greater injury to Chest Deceleration.

The agency concluded that a combined effect of injury to the head and chest should be used, since it is well documented that an individual who suffers multiple injuries has a higher risk of permanent disability or death. Therefore, a combined probability of an AIS≥4 injury is calculated from equations 1 and 2 as:

$$\text{Combined Probability } (P_{\text{combined}})=P_{\text{head}}+P_{\text{chest}}-P_{\text{head}\times\text{chest}}$$

This equation is applied to the Head Injury Criteria and Chest Deceleration responses of the driver and passenger dummies in each NCAP test.

## NCAP EFFECTIVENESS

Mr. CARR. Please cite some specific examples of NCAP's effectiveness and impact on safety.

[The information follows:]

NCAP scores have improved steadily since the beginning of the program in 1979. Significant reductions in average head injury criteria (HIC) from approximately 1,300 in 1980 to less than 700 in 1993 have occurred in passenger cars (PC's). Lower HIC's indicate reduced probability of serious head injury. Similar reductions are now being noted for light trucks, vans, and sport utility vehicles. A much higher percentage of PC's are now meeting the injury prevention requirements of the dynamic occupant protection standard (FMVSS No. 208) even at the higher NCAP crash speed. In model year (MY) 1993, 80 percent of the PC's met FMVSS No. 208 requirements in the NCAP tests compared to only 25 percent in MY 1979.

Results from a recent analysis of the Fatal Accident Reporting System data show a statistically significant correlation between NCAP performance and the fatality risk of belted drivers in actual head-on collisions. The analysis indicates that the driver of a car which performs well in NCAP is on the average, about 15 to 30 percent less likely to be killed than the driver of car which performs poorly in NCAP.

Also, as vehicles are redesigned and subsequently retested in NCAP, manufacturers often incorproate changes which improve their NCAP test performance, such as the inclusion of driver and front passenger air bags.

### NCAP—PRESS RELEASE DISTRIBUTION

Mr. CARR. How many copies of the NCAP press release were distributed in calendar years 1992, 1993 and estimated for 1994?

[The information follows:]

NCAP data are made available through regular press releases throughout the model year as the tests are completed. These press releases are distributed to all the major news services, consumer groups, magazines, and many other associations. Over 1,000 different organizations with readership in the tens of millions receive these press releases.

The exposure to the public of the NCAP data through the different media also results in many individual inquiries to NHTSA. The Agency responds to approximately 20 thousand telephone calls each year regarding the crashworthiness test results. Approximately 18,000 requests were processed during 1992, and in 1993 the requests for crash test results increased to approximately 22,000. Thus far, we have had approximately 6,400 requests for 1994 which indicates an even higher number than in prior years.

Following is a breakdown of the press releases issued each year as requested.

*1992 NCAP Program*—Seven press releases were issued from January 1992 through September 1992.

*1993 NCAP Program*—Six press releases were issued from November 1992 through June 1993.

*1994 NCAP Program*—To date, three press releases have been issued on the 1994 program beginning with December 1993.

### NCAP PROGRAM—TOTAL COSTS

Mr. CARR. What was the total cost of the NCAP program, including NHTSA staff, contractor costs, the vehicles and dummies, and related items in fiscal year 1994 and what is projected for fiscal year 1995?

[The information follows:]

The attached tables contain the breakdown of the 1994 NCAP costs and the proposed breakdown of the fiscal year 1995 NCAP costs.

Table 1
Detailed Breakdown of 1994 NCAP Costs

| Project Description | | Budget Amount |
|---|---|---|
| 1994 NCAP Costs | Vehicle Purchases (39) | $ 710,892 |
| | Vehicle Testing (39) | $ 729,925 |
| | Dummy Calibrations | $ 20,000 |
| | Dummy Parts and Refurbishing | $ 36,183 |
| | Video Production | $ 28,000 |
| | Administrative Costs | $ $85,000 * |
| | Subtotal | $ 1,610,000 |
| | NHTSA Staff (7) | $ 459,000 |
| | Total | $2,069,000 |
| NCAP Promotional Program | Create Promotional Material (Brochures, Radio & Print Spots) | $105,000 |
| | Develop, Reproduce, & Disseminate Promotion Material | $ 90,000 |
| | Develop, Reproduce, & Disseminate Consumer Material | $ 55,000 |
| | Total | $250,000 |
| *Total FY 1994 NCAP Costs* | | *$2,319,000* |

* Administrative costs include computer support, hot copy, printing, and distribution costs.

Table 2
Detailed Breakdown of Proposed FY 1995 NCAP Costs

| Project Description | | Budget Amount |
|---|---|---|
| | | |
| Frontal Impact NCAP FY 1995 Budget Plans | Vehicle Purchases (38) | $ 792,000 |
| | Vehicle Testing (38) | $ 665,000 |
| | Dummy Calibrations | $ 25,000 |
| | Dummy Parts and Refurbishing | $ 50,000 |
| | Video Production | $ 28,000 |
| | Administrative Costs | $ 80,000* |
| | Subtotal | $1,640,000 |
| | NHTSA Staff (7) | $ 479,000 |
| | Total | $2,119,000 |
| Side Impact NCAP FY 1995 Budget Plans | Vehicle Purchases (14) | $ 292,000 |
| | Vehicle Testing (14) | $ 200,000 |
| | Impact Barrier Purchases (14) | $ 23,000 |
| | Dummy Calibrations | $ 21,000 |
| | Dummy Parts and Refurbishing | $ 43,000 |
| | Administrative Costs | $ 41,000* |
| | Total | $ 620,000 |
| NCAP Promotional Program | Promotional Material (Brochures, Radio & Print Spots & Electronic Dissemination) | $ 150,000 |
| | Reproduce & Disseminate Consumer Material | $ 50,000 |
| | Total | $ 200,000 |
| *Total FY 1995 NCAP Costs* | | *$2,939,000* |

* Administrative costs include computer support, hot copy, printing, and distribution costs.

## NCAP SIDE IMPACT DEVELOPMENT

Mr. CARR. What was spent during fiscal years 1993 and 1994 on side impact test development in the NCAP?

[The information follows:]

Congress provided funds as requested by the agency to conduct crash testing of 12 side impact tests in fiscal year 1993. There were no funds provided for conducting side impact tests in fiscal year 1994. The following breakdown give details of the fiscal year 1993 side impact test program expenditures.

| | |
|---|---|
| Vehicle Testing (12) | $151,000 |
| Vehicle Purchases (12) | 170,800 |
| Aluminum Honeycomb Barriers | 67,000 |
| Side Impact Dummies | 106,800 |
| Dummy Calibrations | 18,000 |
| Administrative costs [1] | 45,000 |
| Total | 558,600 |

[1] Administrative costs include computer support, hot copy, printing and distribution costs.

The fiscal year 1993 Side Impact NCAP budget was $620,000. In addition to the above expenditures, procurement action was initiated for more side impact dummies. This action was cancelled because the dummies were not immediately available and Congress declined to continue the program in fiscal year 1994. Therefore, there was a surplus at the end of the fiscal year.

## NCAP—COST DATA

Mr. CARR. Please update the cost data for the NCAP as shown on page 309 of last year's hearing record.

[The information follows:]

Test costs include the cost of the vehicle, the cost to calibrate the anthropomorphic test devices, and the cost to perform the fixed barrier test.

The 1987 NCAP cost was $950,000 (38 tests at $25,000 each). The 1988 per-test cost remained the same, and the total, excluding Optional NCAP tests, was $850,000 (34 tests at $25,000 each). The 1989 per-test cost increased to $26,000, while the total cost was $858,000 (33 tests at $26,000 each).

Due to the increased use of the advanced anthropomorphic test device (the Hybrid III test dummy) and correspondingly increased number of instrumentation data channels, the 1990 per-test cost increased to $29,000. The total cost of the 1990 program was $1,015,000 (35 tests at $29,000 each). One test was invalidated, thus only 34 test results were released.

Because a great number of low-cost vehicles were selected for the 1991 program, its per-test cost decreased to $27,000. The total 1991 program cost was $918,000 (34 tests at $27,000 each). Two tests were invalidated, and one test was postponed to the 1992 NCAP program. Therefore, only 31 test results for 1991 were released.

Due to the increase in the costs of vehicles and the addition of airbags and antilock brake systems in some vehicles, the per-test cost in 1992 increased to $29,684. The total 1992 program cost, excluding one optional NCAP test, was $1,038,940 (35 tests at $29,684 each). Results were released for 36 tests including the 1991 Nissan Pathfinder for which testing was postponed during 1991 and one optional NCAP test.

The total cost of the 1993 NCAP program was $1,201,337. Results were released for 37 vehicles at an average cost of $32,469 each. There were 21 vehicles equipped with the driver's airbag and six equipped with the passenger side airbag as well. The Hybrid III dummy was used in 15 of the tests, one of which used the Hybrid II dummy in the passenger position.

The per test cost for the 1994 NCAP is expected to increase to $37,457 due to the increase in the costs of the vehicles with the addition of the passenger side airbag, more expensive vehicles being tested, and the use of Hybrid III dummies in most of the vehicles. The total 1994 program cost is estimated to be $1,460,823 (39 tests at $37,457 each). It is expected that results will be released for 39 tests.

### NCAP—VEHICLES TESTED

Mr. CARR. Please provide a final listing of the motor vehicles you tested in NCAP in 1993 and a list of vehicles selected for 1994, along with planned dates you propose to publish test results for each vehicle, similar to that appearing on pages 310 through 314 of last year's hearing record.

[The information follows:]

The following is a list of the vehicles tested in the 1993 New Car Assessment Program (NCAP), along with the dates of the tests and press releases. Next is a list of the vehicles selected for the 1994 NCAP with actual or proposed dates of tests and press releases. In most cases, the planned dates for publication of the test results are contingent upon the approval of the press releases.

1993 NCAP DATES

| MAKE | MODEL | TEST FACILITY | ACTUAL DATE OF VEHICLE TEST | ACTUAL DATE OF RELEASE OF TEST RESULTS |
|---|---|---|---|---|
| Chevrolet | C-1500 4x2 PU | TRC | 8/6/92 | 11/2/92 |
| Mazda | 626 4-dr | TRC | 8/18/92 | 11/2/92 |
| Pontiac | Bonneville 4 dr | CAL | 9/3/92 | 11/2/92 |
| Jeep | Grand Cherokee 4x4 4 dr | CAL | 8/27/92 | 12/23/92 |
| Dodge | Dynasty 4 dr | CAL | 10/27/92 | 12/23/92 |
| Pontiac | Grand Am 4 dr | CAL | 10/13/92 | 12/23/92 |
| Toyota | Corolla 4 dr | CAL | 10/21/92 | 12/23/92 |
| Buick | Century 4 dr | TRC | 10/29/92 | 12/23/92 |
| Nissan | Quest Van | MSE | 10/29/92 | 12/23/92 |
| Nissan | Altima 4 dr | CAL | 11/18/92 | 2/3/93 |
| Chevrolet | S-10 Blazer 4x4 4 dr | TRC | 11/24/92 | 2/3/93 |
| Dodge | Intrepid 4 dr | TRC | 11/10/92 | 2/3/93 |
| Nissan | Pickup 4x2 | MSE | 11/10/92 | 2/3/93 |
| Mitsubishi | Mirage 4 dr | MGA | 11/23/92 | 2/3/93 |
| Ford | Ranger PU 4x2 | MSE | 12/2/92 | 2/3/93 |
| Toyota | Pickup 4x2 | MGA | 12/2/92 | 2/3/93 |
| Honda | Civic 4-dr | CAL | 12/8/92 | 3/8/93 |
| Ford | Tempo 4 dr | MGA | 1/14/93 | 3/8/93 |
| Ford | Explorer MPV 4x4 4 dr | MSE | 12/17/92 | 3/8/93 |
| Toyota | Previa Van | TRC | 1/6/93 | 3/8/93 |

# 1993 NCAP DATES

| MAKE | MODEL | TEST | ACTUAL DATE OF VEHICLE TEST | ACTUAL DATE OF RELEASE OF TEST RESULTS |
|---|---|---|---|---|
| Toyota | 4-Runner MPV 4x4 4 dr | MSE | 12/9/92 | 3/8/93 |
| Ford | Probe 2-dr | TRC | 2/11/93 | 4/8/93 |
| Ford | Bronco MPV 4x4 2 dr | MGA | 1/27/93 | 4/8/93 |
| Honda | Accord 4-dr | CAL | 2/9/93 | 4/8/93 |
| Dodge | Ram 150 PU | CAL | 1/19/93 | 4/8/93 |
| Dodge | Stealth 2 dr | TRC | 12/16/92 | 4/8/93 |
| Chevrolet | Suburban 4X4 4 dr | TRC | 2/3/93 | 4/8/93 |
| Honda | Civic Coup 2-dr | MSE | 3/12/93 | 6/1/93 |
| Saab | 9000 CS 4 dr | TRC | 3/8/93 | 6/1/93 |
| Mitsubishi | Montero 4X4 4 dr | TRC | 2/17/93 | 6/1/93 |
| Volkswagen | Eurovan | TRC | 1/27/93 | 6/1/93 |
| Toyota | T100 4X2 PU | MSE | 12/15/92 | 6/1/93 |
| Toyota | Tercel 4-dr | MSE | 3/3/93 | 6/1/93 |
| Nissan | Sentra 4-dr | MSE | 3/10/93 | 6/1/93 |
| Isuzu | Rodeo 4X4 4 dr | CAL | 3/23/93 | 6/1/93 |
| Subaru | Legacy 4-dr | CAL | 3/9/93 | 6/1/93 |
| Ford | Taurus 4-dr | TRC | 3/17/93 | 6/1/93 |

## 1994 NCAP DATES

| MAKE | MODEL | TEST FACILITY | PROPOSED OR ACTUAL DATE OF VEHICLE TEST | PROPOSED OR ACTUAL DATE OF RELEASE OF TEST RESULTS |
|---|---|---|---|---|
| Chevrolet | Astro Van | CAL | 8/31/93 | 12/14/93 |
| Chevrolet | Camaro 2 dr | CAL | 8/24/93 | 12/14/93 |
| Chrysler | New Yorker 4 dr | CAL | 8/3/93 | 12/14/93 |
| Dodge | Caravan Van | TRC | 9/29/93 | 12/14/93 |
| Mitsubishi | Galant 4 dr | MGA | 8/4/93 | 12/14/93 |
| Dodge | Spirit 4 dr | TRC | 10/20/93 | 1/28/94 |
| Ford | Bronco 4X4 2 dr | TRC | 11/24/93 | 1/28/94 |
| Lexus | GS300 4 dr | TRC | 10/27/93 | 1/28/94 |
| Mazda | 626 4 dr | CAL | 11/4/93 | 1/28/94 |
| Pontiac | Transport Van | TRC | 10/13/93 | 1/28/94 |
| Cadillac | Deville 4 dr | TRC | 1/19/94 | 2/28/94 |
| Chevrolet | Corsica 4 dr | MGA | 1/24/94 | 2/28/94 |
| Infiniti | J30 4 dr | CAL | 11/23/93 | 2/28/94 |
| Toyota | T100 2 dr PU | TRC | 12/22/93 | 2/28/94 |
| Chevrolet | S-10 PU | MSE | 1/16/94 | April 1994 |
| Dodge | Dakota PU | MSE | 2/10/94 | April 1994 |
| Ford | F-150 PU | MSE | 1/19/94 | April 1994 |
| Ford | Thunderbird 2 dr | MGA | 3/4/94 | April 1994 |
| Oldsmobile | Achieva 2 dr | MGA | 1/17/94 | April 1994 |
| Pontiac | Grand Prix 2 dr | CAL | 2/24/94 | April 1994 |
| Toyota | Camry 4 dr | TRC | 3/9/94 | April 1994 |
| Toyota | Corolla 4 dr | MSE | 2/5/94 | April 1994 |
| Buick | Regal 4 dr | MGA | 3/8/94 | May 1994 |
| Chevrolet | Sport Van | MGA | 3/22/94 | May 1994 |
| Ford | Escort Wagon | MSE | 3/9/94 | May 1994 |
| Ford | Probe 2 dr | MSE | 3/11/94 | May 1994 |
| Honda | Accord 4 dr | MGA | 3/1/94 | May 1994 |
| Jeep | Wrangler 2 dr | MGA | 3/5/94 | May 1994 |
| Mercedes | C-220 4 dr | TRC | 3/30/94 | May 1994 |
| Nissan | Altima 4 dr | MGA | 3/21/94 | May 1994 |
| Toyota | Previa Van | MGA | 3/18/94 | May 1994 |
| Volvo | 850 4 dr | CAL | 3/24/94 | May 1994 |
| BMW | 325i 4 dr | TRC | 1/26/94 | June 1994 |
| Chevrolet | Caprice 4 dr | MSE | April 1994 | June 1994 |
| Chrysler | Neon 4 dr | MSE | May 1994 | June 1994 |
| Dodge | Ram T300 PU | TRC | 1/5/94 | June 1994 |
| Honda | Civic 4 dr | MSE | April 1994 | June 1994 |
| Hyundai | Elantra 4 dr | MSE | April 1994 | June 1994 |
| Nissan | Quest Van | MSE | April 1994 | June 1994 |

| Test Facilities | |
|---|---|
| | CAL = Calspan Advanced Technology Center |
| | MGA = MGA Research Corporation |
| | MSE = Mobility Systems and Equipment Company |
| | TRC = Transportation Research Center |

## NCAP TEST PERIOD

Mr. CARR. Testing for the 1993 NCAP program occurred from November 1992 through May 1993. Why does it take so long to conduct the NCAP tests for new models and why can't all of the tests be conducted at the start of the model year?

[The information follows:]

There are two major difficulties that prevent the agency from conducting all of the tests at the start of the model year. First, all new model year vehicles are not available at the start of the model year. Vehicle manufacturers usually introduce their new models during the first half of the model year, but not all of them at the beginning of the model year. Second, only four of the private test laboratories in the nation that can perform the complex full scale vehicle impact tests bid on government contracts. These laboratories not only perform this type of test for the government but for vehicle manufacturers and other parties. Usually all these laboratories have a very full test schedule for the entire year.

## NCAP PROMOTIONAL ACTIVITIES

Mr. CARR. NHTSA's fiscal year 1994 budget included $250,000 for NCAP promotional activities. What results were achieved with these funds and why do you need additional funding of $250,000 for similar purposes during fiscal year 1995?

[The information follows:]

The $250,000 appropriated in fiscal year 1994 for the NCAP Promotional Program is being used to implement new promotional methods. These include the production of effective radio, print, and video public service announcements in addition to consumer brochures for dissemination.

The agency's funding request for the promotional activities was $200,000 for fiscal year 1995, which will permit follow-up work from 1994 as well as some additional programs.

The attached tables contain the breakdown of the fiscal year 1994 funding for the NCAP Promotional Program and the proposed breakdown for the FY 1995 budget. In addition to Print ads, the following projects are scheduled for fiscal year 1994:

*Video News Release and Radio Public Service Announcements*—Procurement action has begun for the development and production of a five-minute video news release (VNR) and an audio news release (ANR) on the New Car Assessment Program. The VNR will provide an overview of the program history, the service NCAP provides to consumers, how crash tests are conducted, and how results should be used. It will emphasize other safety features to look for when buying a new car as well as how easy it is to obtain and use the NCAP scores.

*Development of NCAP Brochure*—It will feature NCAP data and general occupant protection information, under the broader theme of buying your new car with attention on safety.;

*Generating Grassroots Interest*—Work has been initiated with the U.S. Office of Consumer Affairs to collect input on how to reach culturally diverse audiences with NCAP information and traffic safety messages, as well as, devise future programs, materials, and outreach methods.

*Fax Dissemination Service*—Operate a fax data dissemination service through the Hotline. Promotion of the service will be through NCAP and Hotline campaigns.

Breakdown of FY 1994 Promotional Program Budget

| Project Description | Budget Amount |
|---|---|
| Create Promotional Material (Brochures, Radio & Print Spots) | $ 105,000 |
| Develop, Reproduce & Disseminate Promotion Material | $ 90,000 |
| Develop, Reproduce & Disseminate Consumer Material | $ 55,000 |
| Total FY 1994 Budget | $ 250,000 |

Breakdown of FY 1995 Promotional Program Budget

| Project Description | Budget Amount |
|---|---|
| Promotional Material (Brochures, Radio & Print Spots & Electronic Dissemination) | $ 150,000 |
| Reproduce & Disseminate Consumer Material | $ 50,000 |
| Total FY 1995 Budget | $ 200,000 |

## NCAP—VEHICLES TESTED WITH HYBRID II DUMMY

Mr. CARR. How many vehicles have been tested to date in the 1994 NCAP and which vehicles were tested with the Hybrid II test dummy?

[The information follows:]

There are 39 vehicles scheduled for testing in the 1994 NCAP. Thirty-two have been tested as of March 15, 1994. The Hybrid III dummy was used in the driver's position in all vehicles. The Hybrid II dummy was used in the passenger's position in the following vehicles: Ford Bronco, Ford Escort Station Wagon, Ford F–150 Pickup, and Toyota T–100 Pickup.

Hence, of the 32 vehicles tested to date, 28 used the Hybrid III dummy in both driver and passenger positions, and 4 used the Hybrid III for driver and the Hybrid II for passenger.

## RULEMAKING—SIDE IMPACT TEST DUMMY

Mr. CARR. On September 15, 1993, NHTSA terminated a rulemaking concerning the use of side impact dummies in addition to or as a replacement for the SID test dummy. Why was the rulemaking terminated and why did the agency reject the EuroSID and BioSID as alternative test dummies?

[The information follows:]

Commenters to the notice of proposed rulemaking agreed that an improved dummy, other than SID, is needed for better side impact protection evaluation and certification. However, there were differences of opinion as to the most appropriate successor dummy to the SID. Most of the United States and Japanese respondents supported the development and use of a single side impact dummy, but not as an alternative to the SID. Most commenters urged the development of a single worldwide dummy more representative of humans, since none of the existing dummies was deemed sufficiently humanlike in its impact responses. Inasmuch as the SID was found to be "good enough" for the initial development of substantial improvements in side impact safety and the available data are not sufficient to resolve the outstanding issues regarding the suitability of either the EuroSID or the BioSID for side impact certification, the agency decided to terminate the rulemaking.

The agency rejected further development and use of BioSID or EuroSID because the commenters could not agree on which dummy would be most suitable for side impact work. Most Europeans favored the use of the EuroSID, even though the EuroSID exhibited more serious technical problems than the BioSID. The United States users, while rejecting the EuroSID for its limitations, could not agree on the suitability of the BioSID, claiming it lacked a humanlike response. Commenters agreed that the EuroSID and BioSID dummies have the capability to make additional measurements, but there was no consensus, beyond chest compression, on what those measurements mean in terms of injury potential, which of them are really needed, and which are merely of interest. The need for harmonization was supported or implied by most commenters, but there was no agreement on how harmonization should be achieved.

## TEST DUMMY INTERNATIONAL HARMONIZATION

Mr. CARR. Please discuss recent progress toward standardization and international harmonization of test dummies, and any relevant goals NHTSA has established.

[The information follows:]

The agency has been promoting the use of harmonized test tools and test procedures since its inception. This is manifested in sponsorship and participation at International Experimental Safety Vehicles conferences and through participation in various technical activities of Experimental Safety Vehicles, Society of Automotive Engineers and International Standards Organizations working groups. Experimental Safety Vehicles and International Standards Organizations working groups have been primarily engaged in promoting the use of common test dummies and developing a technical basis for their standardization. As a result of this work, the Hybrid III frontal impact test dummy, while not yet officially adopted as an international standard, has been accepted by a passed International Standards Organizations resolution as a common test device for both vehicle development and certification purposes. The 5th and the 95th percentile Hybrid III dummies will be subjected to a similar acceptance by an International Standards Organizations resolution as soon as their technical problems are resolved.

The agency's attempt, through an advanced notice of proposed rulemaking, to identify a candidate dummy for side impact harmonization has not been successful. It failed partly because none of the dummies is, in the judgement of the involved parties, sufficiently humanlike and useful for the intended purpose and partly because major vehicle manufacturing groups on various continents believe in using different test methods and test tools to solve the side impact problem. To some extent, the development of a world-wide standardized side impact dummy might become even more complex as some vehicle manufacturers believe they can solve the side impact problem with automatic side impact air bags. The evaluation of side impact air bag effectiveness might require a totally different dummy than any in existence today.

To promote international harmonization of future test dummies the agency is working closely with the international community in the development of the advanced frontal impact dummy (TAD 50M). Vehicle users throughout the world have been given the opportunity to participate in the dummy's development and evaluation, and they are now part of the TAD 50M test and number of years away, there are neither defined long term goals nor plans for its harmonization.

## NPRM—STOPPING DISTANCE STANDARDS FOR MEDIUM AND HEAVY TRUCKS

Mr. CARR. NHTSA's notice of proposed rulemaking on stopping distance standards for medium and heavy trucks has been criticized as doing little more than grandfathering existing state-of-the-art braking capabilities of both air and hydraulic systems. In fact, the proposed rule states: "The agency does not anticipate any changes in the braking systems of hydraulic braked heavy vehicles in response to these requirements" and "No improvements in the braking performance of current hydraulic brake equipped trucks will be necessary for these vehicles to comply with the proposed requirements." Why, then, is this proposed regulatory action needed?

[The information follows:]

Heavy vehicles are currently not required to meet any stopping distance requirement with a full service brake system. Some production vehicles exhibit very good stopping performance, and others do not perform as well. The proposed requirements are needed to ensure that all heavy vehicles meet some minimum level of stopping distance performance. The agency believes that the stopping distance requirements combined with the proposed antilock braking systems requirements will help improve the overall braking performance of heavy vehicles.

## SAFETY BELTS—CONSUMER CONCERNS

Mr. CARR. To what extent is the fit and comfort of safety belts cited by consumers as a reason for not wearing safety belts?

[The information follows:]

Occupant complains about uncomfortable safety belts have been well-documented. For instance, the 1984 Final Regulatory Impact Analysis on implementing automatic occupant crash protection requirements noted that the most often stated reason for not wearing belts was that the person found the belt "uncomfortable." A 1989 agency study entitled, "A Comparison of the Comfort and Convenience of Automatic Safety Belt Systems Among Selected 1988–1989 Model Year Automobiles' (DOT–HS–807–467) concluded persons 59–62 inches tall reported comfort problems with their safety belts more than twice as often as person more than 70 inches tall. The same study concluded that females report comfort problems at a rate more than 150 percent that of males.

## SAFETY BELT DESIGN AND FIT

Mr. CARR. Please summarize what new requirements regarding safety belt design and fit are being considered by NHTSA and discuss the potential safety benefits.

[The information follows:]

The agency is considering two options for a new requirement regarding safety belt design and fit. These include (a) adopt a detailed requirement to ensure proper belt fit, and (b) adopt a general requirement that safety belts be adjustable. The agency believes that improved belt fit may increase safety belt use and decrease safety belt misuse. If the proposed requirement eliminated mis-use alone, approximately 60 lives could be saved and approximately 1,350 moderate-to-critical injuries could be reduced in severity, annually. A one percent increase in safety belt use would result in an estimated reduction of 180 fatalities, and a reduction in severity of 2,400 moderate-to-critical injuries annually.

## SIDE IMPACT CRASHES—INJURIES OF CHILDREN

Mr. CARR. What does your research reveal about the extent to which children are injured in side impact crashes?

[The information follows:]

Based on the Fatal Accident Reporting System data for 1992, there were 462 children under fifteen years of age who were killed as occupants of light passenger vehicles involved in nonrollover side impacts. This includes 164 fatalities under five years old, 119 fatalities aged five to nine years, and 179 fatalities aged ten to fourteen years.

The National Accident Sampling System data indicate that for children under fifteen years old, in 1992 there were 64,000 children with minor injury, 5,300 children with moderate injury, and 1,500 children who sustained serious injury as occupants of light vehicles involved in towaway nonrollover side impacts. Of all children under fifteen years old who were involved in towaway nonrollover side impacts, an estimated 51 percent were uninjured, 44 percent had minor injury, 3.7 percent had moderate injury, 1.0 percent survived serious injury, and 0.3 percent received fatality injuries.

## SIDE IMPACT CRASHES—CHILD SAFETY RESEARCH

Mr. CARR. What regulatory research is planned during fiscal year 1995 concerning child safety in side impact crashes?

[The information follows:]

Currently, the agency is seeking, from vehicle manufacturers, information on the design and performance of side impact air bags during side direction crashes. The agency is also gathering geometrical measurements of vehicle interiors using various dummies to determine any incompatibility between side air bags and child restraints.

Based on this information, the agency plans to formulate a regulatory research plan, including 1995 research, addressing child safety in side impact crashes and compatibility between side air bags and child restraint occupants.

## NPRM—CHILD BOOSTER SEATS

Mr. CARR. Please address how your proposed rule on child booster seats deals with improved booster seat designs; injury and performance criteria; and consumer misuse of booster seats.

[The information follows:]

The proposed rule aims at improving booster seats two ways. First, the rule proposes to amend the test procedure of Federal Motor Vehicle Safety Standard No. 213, Child Restraint Systems, to allow the manufacture and sale of belt positioning booster seats. The amendment would do this by allowing compliance testing with a vehicle's lap and shoulder belt, compared to the current rule which only allows testing with a lap belt. Even though the agency believes that these seats will improve safety, the magnitude of that improvement is now known. Second, the rule proposes to limit the recommended child weight range to use both shield and belt-positioning booster seats.

Limiting the minimum weight to 30 pounds would enable manufacturers to design the seat to meet a narrowly defined set of weight/height characteristics. As to the issue of injury and performance criteria, the rule is not proposing new criteria for children restrained in booster seats because, at this time, there is insufficient information to warrant a change.

The rule proposes to minimize consumer misuse of booster seats by requiring that a warning against misuse be placed on the label that is affixed to child booster seats and in the printed material that accompanies the seats. The rule requires manufacturers to place on the label and in the printed instructions that the booster seat shall not be recommended for children whose weight is less than 30 pounds. The rule also requires that warnings be placed on the various types of booster seats about the proper use of the vehicle belt systems—lap alone for shield booster seat and lap/shoulder for a belt-positioning booster seat.

## TEST DUMMIES—CHILD RESTRAINT COMPLIANCE TESTING

Mr. CARR. What test dummies are currently used for child restraint compliance testing?

[The information follows:]

Two test dummies are currently used for child restraint tests. A six-month-old child size, uninstrumented dummy weighing approximately 17 pounds and conforming to 49 CFR Part 572, Subpart D, is used with restraints for children weighing up to 20 pounds. A three-year-old size dummy weighing approximately 33 pounds and instrumented with head and chest accelerometers and conforming to 49 CFR Part 572, Subpart C, is sued with restraints for children weighing more than 20 pounds. As of September 1, 1993, this three-year-old dummy must be equipped with a fiberglass head.

Mr. CARR. NHTSA has indicated that test procedures for booster seats, as well as other types of child restraints, would be improved if additional test dummies representing children of different ages were used in compliance tests. What steps has NHTSA taken toward developing an instrumented nine month dummy and a newborn infant dummy?

[The information follows:]

A final rule was published on January 8, 1993, in the Federal Register, introducing a newborn infant dummy into 49 CFR part 572. On March 16, 1994, the agency published a notice of proposed rulemaking to introduce the infant dummy along with an instrumented six-year-old dummy and an uninstrumented nine-month-old dummy into Federal Motor Vehicle Safety Standard No. 213, Child Restraint Systems. The notice proposes to use these newly introduced dummies and the existing three-year-old dummy in compliance testing of child restraint systems.

Currently, the agency has no plans to incorporate an instrumented nine-month-old dummy into the standard. However, the agency plans to evaluate newly-developed child dummies such as the instrumented twelve-month-old Child Restraint and Air Bag Interaction dummy that is being developed by the Society of Automotive Engineers.

## RULEMAKING SCHEDULE FOR CHILD BOOSTER SEATS

Mr. CARR. What is your current schedule for rulemaking completion on child booster seats?

[The information follows:]

A notice of proposed rulemaking on booster seats was published in the Federal Register on September 3, 1993. Currently the comments received are being analyzed. The NHTSA Authorization Act of 1991 directs the agency to complete this rulemaking by July 1994. The agency expects to meet this mandate. The final rule is expected to be effective 30 days after the date of publication of the rule.

## NPRM—SCHOOL BUS FLAMMABILITY

Mr. CARR. The NTSB has identified improved school bus flammability rules as a high priority. Last year, NHTSA indicated that it would issue a notice of rulemaking on this subject by January 1994, but the rule has not yet been released. What is the reason for the continued delay?

[The information follows:]

In February 1991, the agency issued a notice requesting information about the flammability of school bus interiors. The notice explained that changes in the emergency exit requirements for school buses could affect the needed level of fire resistance of school bus interiors.

The commenters expressed differing views about the need to improve the flame resistance of school bus interiors. Most commenters agreed that upgrading the standard would result in a significant cost increase in school buses. The cost increase estimates ranged from $275 to $1,000 for a 66-passenger school bus.

The agency has not yet determined whether, and if so, how, to proceed with rulemaking in this area. We expect to make a decision on this issue after a new Administrator is confirmed.

## FRONTAL CRASH PROTECTION STANDARDS

Mr. CARR. Please discuss NHTSA's current and planned activities to explore the feasibility of upgrading frontal crash protection standards.

[The information follows:]

Even after full implementation of driver and passenger air bags as required by FMVSS No. 208, frontal impacts will still account for up to 10,000 fatalities and 120,000 moderate to critical injuries. The objective of the research program is to address these fatalities and injuries and provide a basis for the possible future upgrade of FMVSS No. 208. Such an upgrade must balance improved frontal protection against the possibilities of increased risk from faster deploying air bags and the implications of increased frontal stiffness of vehicles on vehicle-to-vehicle crashes.

A detailed definition of the remaining safety problem for frontal impacts, subsequent to the full implementation of the current dynamic frontal crash protection standard, has been initiated. Research is underway for investigating the real world crash environment and projecting the occupant injuries that will occur for an all air bag fleet. This includes summarizing the human loading and injury tolerances relevant to frontal crashes. Also, test surrogates and injury criteria are being recommended for use in the crash testing.

Defining the problem includes identifying general laboratory test conditions that can be used to replicate the safety performance of air bag vehicles in use. The injury criteria, test devices, and the development of supplementary test procedures for the evaluation of occupant injury will be addressed by investigating higher severity crashes, other occupant sizes, and additional body regions and/or improved injury criteria. Then a variety of production vehicles will be evaluated, comparing their performance, and conducting potential benefits assessments to guide the agency for the "final" selection of a test procedure(s).

To date, a number of frontal offset crash tests using air bag equipped production cars have been conducted. The first test series involved moving car-to-car tests with a nominal 116 KPH (72 MPH) closing speed and 60 percent engagement of the subject vehicle by the striking or bullet vehicle. A fiftieth percentile Hybrid III dummy was used as the test surrogate in the driver's seating position. In a second series, frontal offset tests were conducted similarly to the first series except that there were engagements of 50 and 70 percent of one of the subject vehicles. The tests were conducted to evaluate the effects of overlap percentage. An additional test was conducted in this series to evaluate the effect of an oblique impact on the subject vehicle.

Additional crash test evaluations have included high speed full frontal rigid barrier impact tests. These tests included the use of the 5th and 95th percentile Hybrid III dummies in driver and right front passenger positions.

## FUEL SYSTEM INTEGRITY STANDARD

Mr. CARR. Last year, NHTSA indicated that it was reviewing whether the fuel system integrity standard should be upgraded. Have you developed an action plan and identified potential regulatory initiatives?

[The information follows:]

On December 14, 1992, the agency published a Request for Comments notice related to possible rulemaking to upgrade Federal Motor Vehicle Safety Standard (FMVSS) No. 301, "Fuel System Integrity," for all types of crash modes.

In August 1993, the agency developed a crashworthiness research plan. The agency has completed some of the planned tasks which include 7 baseline vehicle tests with experimental test procedures. The agency has also conducted detailed analyses of accident files to identify potential areas to upgrade for the standard.

Based on these research results, the agency hopes to make a decision before September 1994 for the future rulemaking directions for FMVSS No. 301.

## ALTERNATIVELY FUELED VEHICLES—SAFETY PERFORMANCE

Mr. CARR. What information is currently available on the safety performance of alternatively fueled vehicles in highway crashes?

[The information follows:]

The sparse number of alternatively fueled vehicles on the road and in highway crashes does not permit statistical analyses of the safety problems. However, NHTSA's National Accident Sampling System (NASS) will begin to collect information on fuel type, tank location, and tank damage and leakage beginning in 1994, which may in the future provide some information on the safety performance of alternatively fueled vehicles.

Currently, the agency relies on anecdotal data received through a variety of informal sources. For example, upon learning of the fuel tank failures of two GMC 1992 Sierra pickup trucks, NHTSA immediately instituted special accident investigations.

Mr. CARR. How does NHTSA plan to monitor and assess the potential safety problems associated with electric and other alternatively fueled vehicles and why would this project require $150,000 in fiscal year 1995?

[The information follows:]

NHTSA has under way a comprehensive program to assure the safe performance of alternatively fueled vehicles on the road and in crashes. The fuel system integrity of these vehicles particularly needs attention because the current fuel system integrity safety standards address only gasoline, diesel, methanol and ethanol. Excluded are compressed natural gas (CNG), electric vehicles, liquefied petroleum gas (LPG or propane), liquefied natural gas (LNG), and hydrogen. The agency is at different stages of program development and implementation for different fuels. The $150,000 will advance NHTSA's knowledge and support the agency's safety activities as follows:

—CNG: By 1995, regulations should be in place for CNG original manufacturer vehicle and fuel container safe performance. However, two CNG fuel tank failures on recent pickup truck conversions have alerted use to new safety issues related to the "fast-fill" refueling procedure. In addition, NHTSA expects to explore design requirements for aftermarket conversions. Both of these areas are expected to require research support.

—Electric Vehicles: NHTSA anticipates requiring research to support issues related to electrolyte spillage and post-crash shock hazard, relating to vehicle performance and component requirements for original manufacturer vehicles, as well as design standards for aftermarket conversions.

—LNG and LPG: To date, NHTSA has not assessed the safety performance of these fuel systems in crashes. Research is anticipated to assess vehicle system performance, as well as design options for aftermarket conversions.

## TEST DUMMY—HYBRID III

Mr. CARR. In fiscal year 1995 $100,000 is requested to upgrade and augment measurement devices used with the Hybrid III test dummy. Please elaborate on the refinements in the Hybrid III test dummy that you plan to explore.

[The information follows:]

The introduction of air bags brought into focus lower limb injuries to vehicle occupants in frontal impacts. While the air bag provides reasonably good protection of the head and chest from serious injuring, lower limb injuries remain unaffected. The Hybrid III dummy has no measuring capability to address effectively tibia, ankle and foot injuries. The requested money will be used to refine these body areas in order to permit the installation of specialized load measuring sensors in these Hybrid III dummy body segments and to evaluate the effectiveness of the measurements for assessment of the injury potential.

## TRUCK UNDERRIDE PROTECTION

Mr. CARR. In November 1993, NHTSA submitted a report on truck underride protection in response to a Senate request. Please summarize the agency's findings on the issues of whether the proposed, maximum proposed 22-inch guard height would allow some vehicles to underride the guards; the effect of guard height on air bag deployment; the effect of guard height on costs and benefits; and the European experience with underride guards.

[The information follows:]

The agency conducted full-scale crash testing with near impact guards designed to comply minimally with the requirements of the 1992 Supplementary Notice of Proposed Rulemaking (SNPRM). The crash tests were conducted at an impact speed of 30 miles per hour with driver and outboard front passenger dummies. The four crash test vehicles were a 1993 GM Saturn 4-door sedan, a 1991 Honda Civic 2-door Hatchback, a 1992 Ford Tempo 4-door sedan, and a 1990 Chevrolet Corsica 4-door sedan. The suspensions of the vehicles were fixed at an altitude that a simulated severe braking prior to the crash tests and the guard ground clearance for each test was 22 inches. The frontal structure profiles of the Honda and the Saturn are among the lowest of vehicles with relatively high sales volumes. The test results indicated that a guard ground clearance of 22 inches will prevent passenger compartment intrusion.

The four crash test vehicles were equipped with driver air bags that deployed successfully in each test. The four vehicles represented a broad range of air bag hardware and sensor locations. The agency concluded that poor air bag performance due to rear impact guard ground clearance is not an issue.

The agency assessed a range of guard ground clearances, 16–22 inches, to determine its effect on the benefits and costs associated with the proposed rulemaking. Lowering the rear impact guard without increasing the strength would result in an estimated increase in fatality and injury reduction benefits of five percent or less. The cost of guards with a 16–18 inch ground clearance was estimated to be 15–20 percent more than the cost of the 22 inch guard.

Great Britain, France, and Germany provided accident statistics that indicate that the heavy truck underride problem is of approximately the same relative magnitude in these countries as it is in the U.S. These countries had adopted a European Economic Communities Directive and/or an Economic Commission for Europe Regulation No. 58 within the past 5–10 years. The 1992 SNPRM is similar in many respects to these European regulations with respect to guard strength and ground clearance. The European requirements are providing injury and fatality reduction benefits, as estimated in the British and German documents, especially in low to moderate speed collisions. Guards meeting the European regulations are not highly effective at preventing passenger compartment intrusion in severe cases. The 1992 SNPRM requires guard strength near the corner of the trailer to be double the strength required by the European regulations, which may result in increased effectiveness in off set collisions.

Mr. CARR. What is the status of your truck underride rulemaking and when do you expect to issue a final rule?

[The information follows:]

The agency expects to issue a final rule in summer 1994.

## REAR END CRASHES

Mr. CARR. What activities is NHTSA conducting to address problems of seat backs collapsing in rear end crashes? What is the extent of the problem and have you identified any potential solutions?

[The information follows:]

On November 23, 1992, the agency published a notice seeking comments on agency analyses and a proposed research plan regarding seat back performance in rear impacts. The notice contained the findings of recent agency analyses of accident data, crash tests, and technical literature concerning seat performance. Most responses to the notice indicated that the agency should investigate real-world accident data before proceeding to a rulemaking action. Issues were raised regarding the adequacy of injury criteria and test dummies to evaluate injury potential in real impacts.

The extent of the problem was addressed in the notice. Collisions resulting in rear impact damage account for the lowest number of injuries and fatalities in comparison to other crash modes. However, rear impacts cause a disproportionate number of minor injuries. A high percentage of these injuries are to the next region. While seat backs can collapse in serious crashes, it is unclear that the collapse necessarily leads to increased occupant injuries. The seat absorbs energy during a rear-end crash, just as the steering column does in a frontal crash. The concept is to allow the energy involved in the crash to deform the seat, thereby reducing collision forces on the occupant. It is possible that a more rigid seat back may cause more injuries.

To address this issue the agency has continued to evaluate real-world accident data and is developing a mathematical seating system model as a tool to be used to explore different safety issues and potential solutions related to seat backs. It is expected that the mathematical model will be sufficiently developed by October 1994 to allow the agency to evaluate these issues.

## OCCUPANT PROTECTION—COSTS

Mr. CARR. Please update the data on air bag and automatic belt costs, as shown on page 289 of last year's hearing record.

[The information follows:]

Retail price estimates for automatic belts and air bags are not available, as they are generally sold as standard equipment. Two sets of cost estimates are provided below. The first updates (for inflation) the agency's original estimates from its 1984 final rule mandating automatic restraints. The second set of estimates in from "tear down" studies of new models performed by a contractor for NHTSA in 1992. When more than one model of a specific type of restraint system was evaluated for its cost in the "tear down" report, a range of estimates is provided. The agency has used both sets of cost estimates in recent analyses.

### INCREMENTAL COST

[1993 dollars]

| System | 1984 Final rule estimates | "Tear down" estimates |
|---|---|---|
| Manual belts | (1) | (1) |
| Automatic belts (non-motorized) | 50 | 28 |
| Automatic belts (motorized) | 212 | None |
| Air bag (driver only) | 318 | 173 to 312 |
| Air bag (driver and right front passenger) | 462 | 289 to 420 |

[1] Base.

## RULEMAKING TIMETABLE

Mr. CARR. Please provide for the record a specific timetable for your significant rulemakings in 1994 and 1995.

[The information follows:]

Below is a list of agency's significant rulemakings and a proposed timetable in 1994 and 1995:

| Title | Action | Date |
|---|---|---|
| Heavy Duty Vehicle Brake System | Final rule | 6/94 |
| Truck Rear Underride Protection | Final rule | 6/94 |
| Flammability of Interior Materials in School Buses | [1] TBD | 9/94 |
| Cars and Light Trucks: Interior Protection From Head Injuries | Final rule | 11/94 |
| School Bus body Joint Strength | Final rule | 5/94 |
| Rollover | NPRM | 4/94 |
|  | Final rule | 10/94 |
| Film Transmittance of Glazing Materials | Final rule | 9/94 |
| Compressed Natural Gas (CNG) | Final rule | 4/94 |
| Wheelchair Lifts | Final rule | 9/94 |
| Antilock Brake Systems in Passenger Cars | NPRM | 12/94 |
|  | Final rule | 9/95 |
| Dynamic Testing of Light Trucks and Vans for Side Impact | NPRM | 4/94 |
|  | Final rule | 8/94 |
| Domestic Content Labeling | Final rule | 5/94 |
| Light Truck Average Fuel Economy (MY's 1996 and 1997) | Final rule | 4/94 |
| Light Truck Average Fuel Economy (MY's 1998 through 2006) | ANPRM | 4/94 |
|  | NPRM | 1/95 |
|  | Final rule | 9/95 |
| Reduce Side Door Ejection | ANPRM | 12/94 |
|  | NPRM | 9/95 |
| Upgrade Roof Crush | NPRM | 12/94 |
|  | Final rule | 9/95 |
| Define "Major Parts" of MPV's and LDT's for Theft Prevention Purposes | NPRM | 5/94 |
|  | Final rule | 10/94 |
| Upgrade Fuel System Integrity | [1] TBD | 9/94 |

[1] To be determined.

## CAFE STANDARD—PASSENGER CARS

Mr. CARR. To what extent was the 27.5-miles-per-gallon CAFE standard for passenger cars met in 1992 and 1993 by domestic and imported vehicles?

[The information follows:]

One of the three major domestic passenger car manufacturers (Chrysler, Ford and GM) met or is projecting to meet the CAFE standard for model year (MY) 1992, while 13 of 20 import passenger car manufacturers met or are projecting to meet the CAFE standard for MY 1992.

Two of three major domestic passenger car manufacturers are projecting to meet the CAFE standard for MY 1993, while 12 of 19 import passenger car manufacturers are projecting to meet the CAFE standard for MY 1993.

| DOMESTIC PASSENGER | 1992 CAFE | SOURCE | 1993 CAFE | SOURCE |
|---|---|---|---|---|
| Chrysler | 27.8 | EPA Final | 27.5* | MMY |
| Ford | 27.4 | EPA Final | 28.1* | MMY |
| GM | 26.8* | EPA Final | 27.4* | MMY |
| Consulier | 23.0* | MMY | ---- | ---- |
| Mazda | ---- | ---- | 29.2 | MMY |
| Vector | 10.1 | EPA Final | 10.0 | MMY |

| IMPORT PASSENGER | 1992 CAFE | SOURCE | 1993 CAFE | SOURCE |
|---|---|---|---|---|
| BMW | 24.0 | EPA Final | 25.2* | MMY |
| Chrysler | 28.9 | EPA Final | 30.8* | MMY |
| Daihatsu | 41.3 | EPA Final | ---- | ---- |
| Fiat | 22.5 | EPA Final | 23.7 | MMY |
| Ford | 25.4 | EPA Final | 27.0* | MMY |
| GM | 31.1* | MMY | 29.7* | MMY |
| Honda | 31.3 | EPA Final | 32.0* | MMY |
| Hyundai | 31.3 | EPA Final | 31.0 | MMY |
| Isuzu | 35.5 | EPA Final | 33.0 | MMY |
| Kia | ---- | ---- | 31.7 | MMY |
| Mazda | 30.7 | EPA Final | 30.8 | MMY |
| Mercedes | 21.8* | EPA Final | 22.9* | MMY |
| Mitsubishi | 28.2 | EPA Final | 29.1* | MMY |
| Nissan | 30.2 | EPA Final | 29.0 | MMY |
| Peugeot | 25.0 | EPA Final | ---- | ---- |
| Porsche | 22.4 | EPA Final | 22.5* | MMY |
| Subaru | 28.1 | EPA Final | 29.3 | MMY |
| Suzuki | 44.7 | MMY | 46.4* | MMY |
| Toyota | 28.8 | MMY | 28.8 | MMY |
| Volvo | 25.6 | EPA Final | 25.9 | EPA Final |
| Volkswagen | 29.2 | EPA Final | 27.0 | MMY |

MMY = Manufacturer submitted mid-model year fuel economy report data

* MMY CAFE estimate includes adjustment for EPA test procedure changes and test fuel properties

## CAFE PENALTIES

Mr. Carr. What was the dollar amount of penalties assessed and collected from each domestic and foreign manufacturer in fiscal year 1993 for noncompliance with CAFE requirements? What is the total to date for fiscal year 1994?

[The information follows:]

## FISCAL YEAR 1993 CAFE PENALTIES COLLECTED

| MODEL YEAR | MANUFACTURER | FLEET | AMOUNT |
|---|---|---|---|
| 1990 | Fiat | Import Passenger Car | $705,220 |
| 1991 | Fiat | Import Passenger Car | $796,575 |
| 1992 | Fiat | Import Passenger Car | $466,750 |
| 1991 | Mercedes | Import Passenger Car | $19,169,540 |
| 1991 | Peugeot | Import Passenger Car | $192,660 |
| 1992 | Peugeot | Import Passenger Car | $58,375 |
| 1989 | Sterling | Import Passenger Car | $588,195 |
| 1990 | Sterling | Import Passenger Car | $162,000 |
| 1991 | Vector | Domestic Passenger Car | $1,740 |
| 1991 | Volvo | Import Passenger Car | $7,768,420 |
| Fiscal 1993 CAFE Penalties Received = | | | $29,909,475 |

## FISCAL YEAR 1994 CAFE PENALTIES COLLECTED*

| MODEL YEAR | MANUFACTURER | FLEET | AMOUNT |
|---|---|---|---|
| 1991 | Rover | Import Light Truck | $520,520 |
| 1992 | Rover | Import Light Truck | $607,620 |
| 1991 | Sterling | Import Passenger Car | $254,840 |
| 1991 | Porsche | Import Passenger Car | $1,871,470 |
| 1992 | Porsche | Import Passenger Car | $781,575 |
| Fiscal 1994 CAFE Penalties Received = | | | $4,036,025 |

* Status as of April 1, 1994

## FUEL ECONOMY STUDIES

Mr. CARR. The fiscal year 1995 budget estimate includes $725,000 for studies of various technologies that may improve automobile fuel economy in the near term. Why is it necessary for NHTSA to conduct special studies in this area? To what extent is evaluative information currently available in from academic and industry studies?

[The information follows:]

NHTSA needs to conduct special studies of emerging technologies in order to establish an independent assessment of the potential fuel efficiency improvements associated with the technology, to support potential fuel economy rulemaking. The agency asks questions of the industry on these technologies in its rulemaking notices, but the responses are incomplete and are generally confined to technologies that a manufacturer is actively pursing. The leadtime that manufacturers supply are related to their own business plans, and the tooling and production cost data a sketchy or, frequently non-existent.

Academic studies are even less satisfactory. Besides the difficulties in uncovering pertinent studies, the studies themselves are usually not directly applicable to supporting fuel economy standards. They may lack industry cost estimates, leadtime information, or efficiency improvement information related to a driving cycle equivalent to the EPA cycle. It is our intent, however, to have contractors build on available studies by completing the information gaps if money is appropriated. For example, the last study on fuel economy technology contracted by NHTSA ("Low tension Piston Rings and Roller Cam Followers for Engine Friction Reduction—Costs of Retooling and Fuel Economy Benefits," August 1988) drew information from six Society of Automotive Engineers papers dating from 1960 to 1986, an American Society of Mechanical Engineers paper, an American Society of Lubricating Engineers paper, a PhD thesis from the University of Michigan, and notes from a University of Michigan summer conference on engine performance, fuel economy and emissions, as well as original work by the authors who were an automotive engineer, a professor of automotive engineering, and an automotive industry cost analyst.

The agency's own fuel economy technical staff is too small to complete this sort of analysis.

Mr. CARR. Please give a status report on your activities to upgrade the plants and lines data base. Has the $100,000 provided last year to expand the database to include financial information been obligated? Who is performing the work?

[The information follows:]

The Volpe National Transportation Systems Center (VNTSC) has been developing this product for NHTSA since FY 1993. The goal is to develop a personal-computer-based data base system to (1) provide information on (a) automotive manufacturing facilities in the United States, Canada, and Mexico, and (b) product plans for manufacturers selling cars and light trucks in the United States market, and (2) provide an automotive financial analysis capability calibrated on historical data of GM, Ford, and Chrysler. This capability will include (1) means to distinguish North American financial performance from other regions of the world and (2) means to assess effects of future market and policy scenarios.

A preliminary version of the facilities and product planning portions of the database has been installed on several NHTSA and VNTSC personal computers. Currently, we are reviewing and "debugging" the system.

Fiscal year 1994 funding has been provided to VNTSC to maintain the database and develop the financial analysis capability. Work has not formally started on the financial portion of the database; however, VNTSC has had preliminary discussions on this issue with staff from MIT's International Motor Vehicle Program.

## THEFT PROGRAM MANDATES

Mr. CARR. The fiscal year 1995 budget request includes no funding for the theft prevention program. What NHTSA activities are mandated under the Anti–Car Theft Act of 1992?

[The information follows:]

The Anti Car Theft Act of 1992 (ACTA) requires the agency to (1) extend the theft prevention standard to include any multipurpose passenger vehicles, and light-duty trucks with a gross vehicle weight rating of 6,000 pounds or less, (2) establish a new median theft rate based on model years 1990/1991 passenger motor vehicles stolen in calendar years 1990/1991, (3) designate likely high-theft vehicles (which includes passengers cars, Multipurpose passenger vehicles, and light-duty trucks), (4) identify the major component parts of those vehicles that must be parts-marked in compliance with the theft prevention standard, (5) determine the theft rates for passenger motor vehicles and publish these data, (6) amend the regulations to reflect the limiting of exemptions allowed by ACTA, and (7) prepare two reports to Congress, one due in October 1995 and one due in October 1997. Additionally, the agency must continue the activities required by the Motor Vehicle Theft Law Enforcement Act of 1984, (e.g., require insurers of motor vehicles to report to the agency on motor vehicle theft experience).

Mr. CARR. In the absence of contract funding, how does NHTSA plan to comply with any statutory mandates?

[The information follows:]

The agency can continue its activities under the law as most of these do not involve contract funds. However, without contract funding, we will not be able to analyze and disseminate insurance company information.

## MOTOR VEHICLE TITLING, REGISTRATION, AND SALVAGE ADVISORY COMMITTEE

Mr. CARR. What have been the activities of the Motor Vehicle Titling, Registration, and Salvage Advisory Committee during the past year and when will its report to Congress be submitted?

[The information follows:]

On April 23, 1993, Secretary Penña appointed the Committee to study problems relating to motor vehicle titling and registration, and controls over vehicle salvage which may affect motor vehicle theft and fraud. The Committee held five meetings between July 1993 and February 1994 and has completed its work. On March 8, 1994, Secretary Peña submitted the Committee's final report, which contains the results of its studies and recommendations, to the President, Congress, and the Governor of each State.

## THEFT PROGRAM ACTIVITIES

Mr. CARR. What activities currently conducted by NHTSA under the theft program would no longer be conducted in fiscal year 1995?

[The information follows:]

Because of zero funding requested for fiscal year 1995, the agency will not be able to analyze and prepare the theft and recovery data received as a result of the insurers reporting to the agency on their respective motor vehicle theft experience. These data are used in the preparation of the mandated reports to Congress. The first report is due October 1995 and the other is due October 1997.

## COLLISION INSURANCE COST RANKINGS

Mr. CARR. Last year, as part of the agency's settlement of *Consumers Union* vs. *Skinner,* NHTSA compiled an informational brochure giving relative collision insurance cost rankings of cars by make and model. What were the fiscal year 1993 and fiscal year 1994 costs of developing and distributing the brochure to dealers?

[The information follows:]

The cost of publishing and mailing one copy of the insurance cost information in fiscal year 1993 to each of the over 25,000 automobile dealers amounted to $15,600. The National Automobile Dealers Association (NADA), in connection with their petition, requested an additional five copies for each dealer. The agency reproduced five additional copies of the booklet for each dealer, at a cost of $10,400 to the agency, and NADA, at their expense, mailed them to all new automobile dealers including dealers who are not members of that organization.

For fiscal year 1994, NHTSA will bear the cost of publishing and distributing a single copy of the brochure to dealers at a cost of approximately $17,000.

Mr. CARR. What are your plans to distribute the information to dealers in fiscal year 1995?

[The information follows:]

The agency plans to publish and distribute a single copy of the brochure to each dealer in fiscal year 1995.

### VEHICLE SAFETY COMPLIANCE PROGRAM

Mr. CARR. The fiscal year 1994 vehicle safety compliance program included for the first time plans to test safety compliance with the new dynamic side impact standard for passenger cars. What have been the results of the tests conducted to date?

[The information follows:]

Fifteen dynamic side impact compliance tests have been scheduled for the fiscal year 1994 program. The first test is scheduled for April, and, therefore, no results are available at this time.

### SIDE IMPACT COMPLIANCE TESTS

Mr. CARR. How many side impact compliance tests will be conducted in total and what will be the total cost in fiscal year 1994 and fiscal year 1995?

[The information follows:]

In fiscal year 1994, 15 passenger cars will be tested for compliance to the new dynamic side impact protection requirement. In fiscal year 1995, 20 vehicles will be included in the compliance test program. The fiscal year 1994 testing cost is $214,000 for 15 tests and the approximate cost of 15 test vehicles is $329,000 for a total cost of $543,000 for the program. The cost of vehicles for the first year of dynamic side impact protection testing is higher because only 10 percent of vehicle production has to meet the new requirements and these vehicles are typically the larger and more expensive models. The cost of the fiscal year 1995 program should be approximately $310,000 for testing and $440,000 for vehicles for a total of $750,000 for the program (25 percent of vehicle production has to meet the requirements).

### FRONTAL CRASH TESTING

Mr. CARR. Last year, NHTSA indicated that 35 vehicles' tests for compliance with frontal crash standards would be conducted during fiscal year 1994. Is that still your plan? What will be the total cost of the tests?

[The information follows:]

For fiscal year 1994, 35 vehicles will be tested for compliance with frontal crash standards. As of March 22, 1994, 27 of the 35 tests, or 77 percent, have been conducted. The total testing cost at three laboratories is $475,000 and the approximate vehicle cost is $610,000 for 35 vehicles, for a total cost of $1,085,000.

Mr. CARR. Please indicate your plans for frontal crash compliance testing during fiscal year 1995 and the cost associated with these tests.

[The information follows:]

For the fiscal year 1995 compliance program, 30 vehicles will be subject to frontal crash testing at an approximate testing cost of $410,000 and vehicle cost of $520,000, for a total cost of $930,000.

## SAFETY DEFECT RECALLS

Mr. CARR. In 1993, 10.5 million vehicles were recalled for safety defects, an increase over 1992 and 1993. What are the reasons for the increased number of recalls and what are the safety implications?

[The information follows:]

The large number of vehicles recalled in 1993 reflects the effectiveness of the defect investigation program. Of those vehicles recalled, 88 percent were from recalls directly influenced by NHTSA investigations. The remaining manufacturer-initiated recalls were more numerous in number, but involved fewer vehicles. This is because manufacturers have immediate access to warranty and repair records for their vehicles and are able to identify defects quickly, thereby limiting the number of involved vehicles.

Rigorous NHTSA enforcement initiatives to quickly identify, investigate, and push for recall corrective actions have a consequent effect on the motor vehicle industry's willingness to conduct safety recalls. With the growing consumer interest in motor vehicle safety, manufacturers are more willing to conduct safety recalls. The early identification of safety defects by manufacturers will result in fewer vehicles being included in the recall than if the recall occurred later as a result of a NHTSA investigation. Accordingly, the potential cost of the recall is lower if the defect is discovered early and the vehicles are recalled promptly.

The safety implications of the strong NHTSA defects investigation program, and manufacturer's interest in producing safe vehicles, are positive. Identifying and recalling defective vehicles and items of motor vehicle equipment can only improve safety.

Mr. CARR. According to the automobile manufacturers, the majority of automobile recalls are initiated by the car companies without pressure from the federal government. In your justifications, however, NHTSA indicates that 88 percent of 1993 recalls were "influenced by NHTSA defect investigations." What does that mean and how do you determine whether a recall is purely voluntary or influenced by NHTSA?

[The information follows:]

In 1993, 34 percent of the safety defect recalls were influenced by NHTSA. However, of the total number of motor vehicles involved in safety defect recalls, 88 percent were included in NHTSA-influenced recalls.

A recall is considered to be NHTSA-influenced when the manufacturer conducts a recall as a result of an agency investigation or inquiry.

Mr. CARR. According to press accounts, about one-third of all recalled vehicles go unrepaired. What is NHTSA doing to lower that proportion?

[The information follows:]

The "one third" refers to all vehicles which have not been reported as repaired under a safety recall, and includes vehicles which may never be available for the recall work because the vehicles have been scrapped, exported other than by the manufacturer, stolen, or otherwise unregistered for use on the nation's highways.

For those vehicles which have not been remedied and are registered for highway use, NHTSA is very concerned. The agency has numerous activities underway to improve recall completion rates. The agency is promulgating a final rule with respect to the method by which it will determine whether a second owner notification letter shall be required in a recall. Additionally, changes to Federal regulations concerning recalls are being implemented which are intended to increase recall effectiveness. Finally, the agency has a number of initiatives in place and under development to further improve recall completion rates, such as wide publication of manufacturers' toll-free telephone numbers, issuance of additional recall news releases, and improving methods of advising the public of the availability of recall information, especially through the agency's Auto Safety Hotline. These and other actions are described in NHTSA's recent report to Congress entitled, "Efforts by the National Highway Traffic Safety Administration to Improve Safety Recall Completion Rates."

## GENERAL MOTORS RECALLS

Mr. CARR. In January 1994, General Motors announced that it would recall 53,000 1994 Chevrolet S–10 and GM Truck Sonoma pickup trucks due to a supplier part problem. Please provide the details of NHTSA's involvement with this voluntary recall, including what the problem was, how the problem was identified, and your assessment of General Motors' efforts to remedy the problem.

[The information follows:]

As part of the fiscal year 1994 compliance test program, a 1994 Chevrolet S–10 pickup truck was tested to the lateral impact requirements of Federal Motor Vehicle Safety Standard (FMVSS) No. 301, Fuel System Integrity. The stationary truck was struck on the driver's side by a 4,000-pound barrier moving at a speed of 20 mph. A total of 52.5 ounces of fluid spilled from the truck during the static rollover portion of the test.

General Motors (GM) and agency representatives inspected the pickup truck and determined that the spillage occurred from a fuel filler neck vent pipe connection. A parts supplier, Textron, was not fabricating the fuel filler neck assembly per GM specifications. Textron was attaching the vent pipe by soldering instead of brazing.

GM expedited the correctly manufactured filler neck assemblies into production and promptly initiated a recall and remedy campaign to replace 117,200 units on Chevrolet S–10 and GMC Sonoma pickup trucks. Certification data supplied by GM indicated that trucks tested with correctly manufactured filler neck assemblies met all of the requirements of FMVSS No. 301.

## SAFETY STANDARD NONCOMPLIANCE RECALLS

Mr. CARR. How many recalls related to safety standard noncompliance were initiated by NHTSA in fiscal years 1993 and 1994?

[The information follows:]

| Fiscal year | Campaigns— | | | |
|---|---|---|---|---|
| | Vehicle | Equipment | Tire | Total |
| 1993 | 10 | 3 | | 13 |
| 1994[1] | 6 | 1 | | 7 |

[1] As of February 28, 1994.

Mr. CARR. Which safety standards are associated with the greatest rates of noncompliance?

[The information follows:]

In responding to this question, we are defining "problem" as a noncompliance in a test of a safety standard which has significant safety consequences. The three major compliance areas involve those standards dealing with child restraint systems, bus window retention and release, and motorcycle helmets. A summary of test results for fiscal year 1993 involving these standards follows: (Note: fiscal year 1994 testing is in progress and final results are not available at this time)

| Standard | Number— | | Percent |
|---|---|---|---|
| | Tested | Failed | |
| FMVSS No. 213—Child Restraint Systems | 1,657 | 91 | 5.5 |
| FMVSS No. 217—Bus Window Retention and Release | 4 | 1 | 25 |
| FMVSS No. 218—Motorcycle Helmets | 128 | 16 | 12.5 |

The agency will continue to test to these standards to ensure that manufacturers are providing products that comply. Enforcement action will be taken against the manufacturers or distributors of those products that do not comply.

## SAFETY COMPLIANCE ACTIVITIES

Mr. CARR. The conference agreement on the fiscal year 1994 transportation appropriations bill included $100,000 over the budget request for the enforcement program to be applied at the agency's discretion to safety compliance activities. How will these funds be used?

[The information follows:]

The additional $100,000 was used to expand the scope of the motorcycle helmet compliance testing program. The recent proliferation of so-called "fake" or "novelty" helmets in the marketplace has created a heightened awareness of the need for quality headgear for motorcyclists. Although NHTSA has had a continuing enforcement program for helmets, it has only been possible to test a limited number of models each fiscal year. With the $100,000 increase in budget allocation, the agency is expanding one phase of the fiscal year 1994 program (ambient condition tests) to include most helmet models in the marketplace.

## MAJOR ENFORCEMENT ACTIONS

Mr. CARR. Please update the major enforcement actions similar to the list shown on page 335 of last year's hearing record.

[The information follows:]

## MAJOR ENFORCEMENT ACTIONS FISCAL 1993 DEFECT INVESTIGATION ACTIVITIES - MAJOR RECALLS

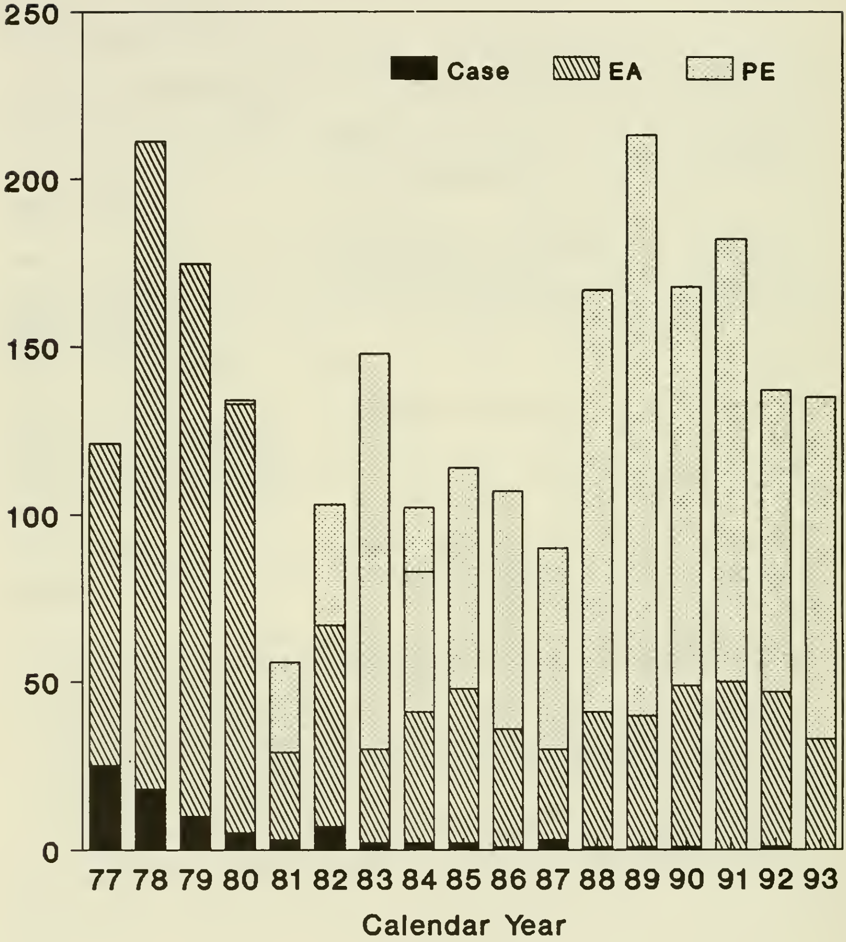
| Make | Problem | Number of Vehicles or Items |
|---|---|---|
| Chevrolet Truck C10/20/30<br>Chevrolet Truck K10/20/30<br>GMC C1500/2500/3500<br>GMC K1500/2500/3500 | Automatic Transmission | 1,702,880 |
| Ford Truck F150/250/350<br>Ford Truck F Super Duty | Fuel Tank Assembly | 1,131,000 |
| Honda Accord/Prelude | Fuel Filler Pipe | 920,583 |
| Ford Taurus<br>Mercury Sable<br>Lincoln Continental | Rear Frame Mounts | 500,000 |
| BMW 325/318/M3 | Engine Coolant System | 375,000 |
| Saturn SC1/SC2<br>Saturn SL1/SL2<br>Saturn SW1/SW2<br>Saturn Sports Coupe<br>Saturn Sports Sedan | Electrical Generator | 352,833 |
| GMC K1500/2500<br>Chevrolet Truck K10/20<br>GMC L Van/Sierra/Safari<br>Chevrolet Truck Blazer<br>Chevrolet Truck Suburban<br>Chevrolet Truck L Van | Brake Disk Rotors | 341,364 |
| Jeep Wrangler | Brake Hose | 280,000 |
| Chevrolet Truck S10<br>GMC S15 | Engine Cooling Fan | 215,052 |

- Opened 134 Preliminary Evaluations (PE) and Engineering Analyses (EA).
- Closed 120 PEs and EAs.
- Influenced 58 recalls as a result of PEs, EAs or ODI inquiries; 6.2 million vehicles and 78,720 items of equipment.
- Evaluated 6 new petitions for defect investigation from the public. 8 petitions were denied, 2 granted and none were active at the end of the fiscal year.
- Received over 1,362 calls per day on the Hotline. Over 497,000 calls were received for recall information, for reporting a defect, for consumer information, and for subjects that were referred to other agencies.

## DEFECT/RECALL HISTORICAL DATA

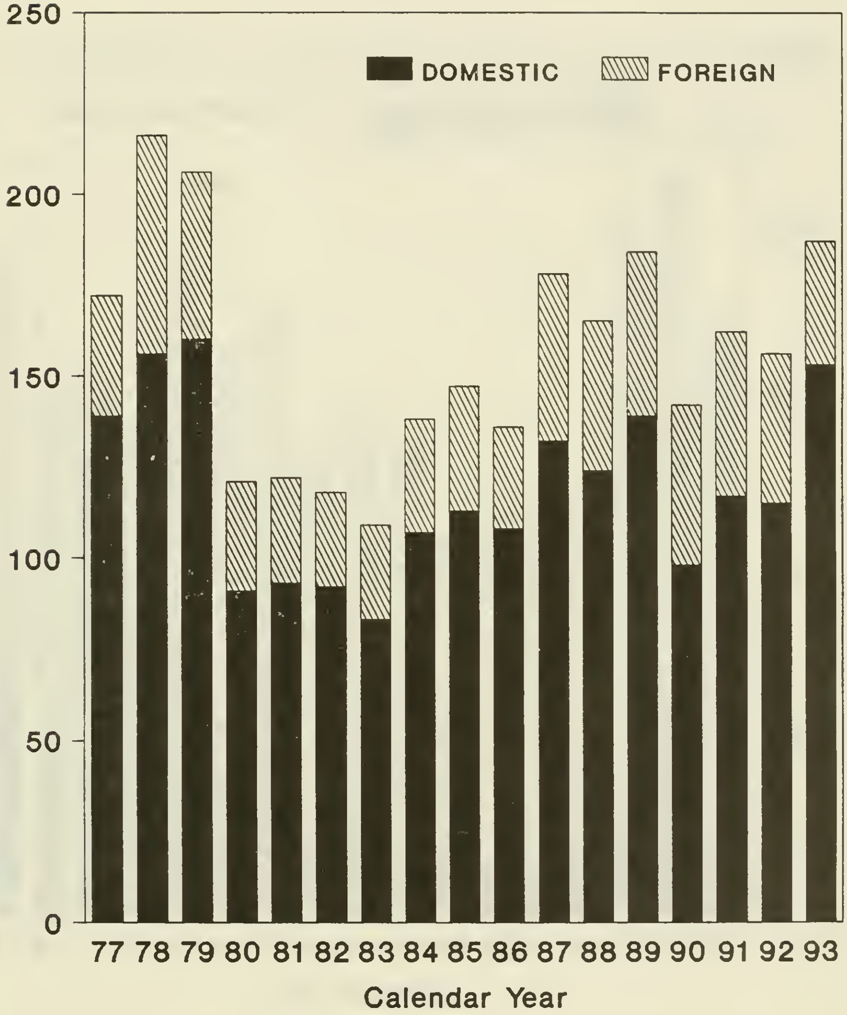
Mr. CARR. Please update the defect/recall bar graphs shown on pages 337 through 341 of last year's hearing record.

[The information follows:]



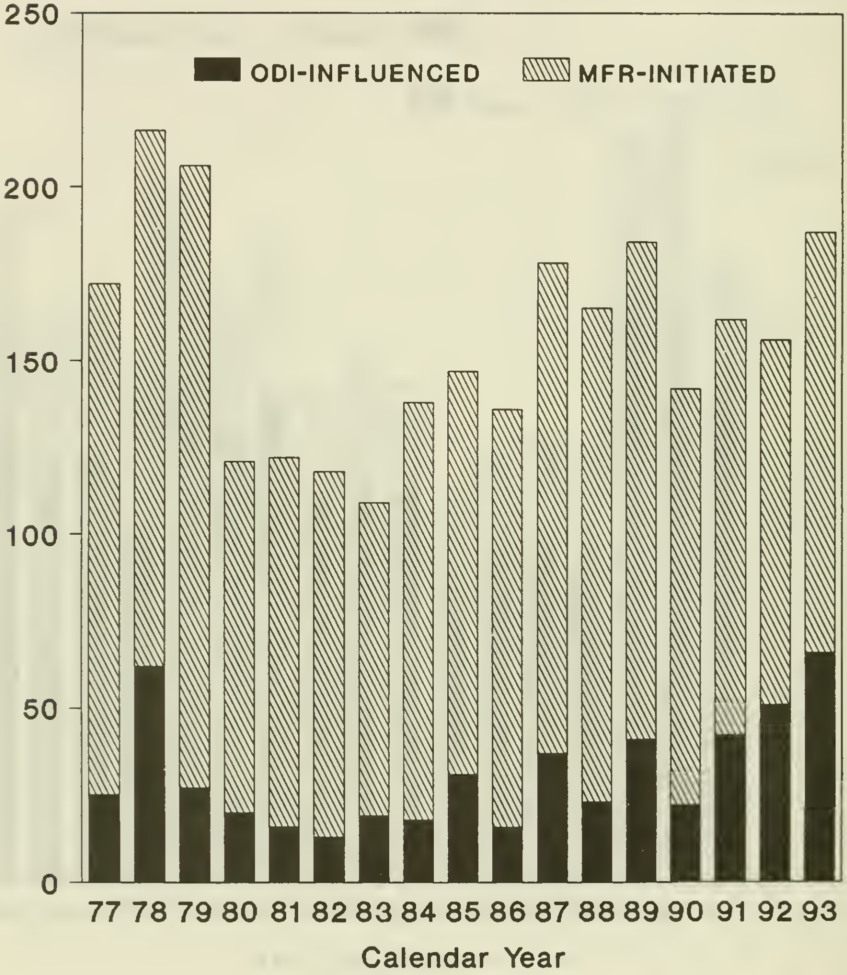
ODI
Investigations Opened

# ODI VEHICLE RECALL CAMPAIGNS

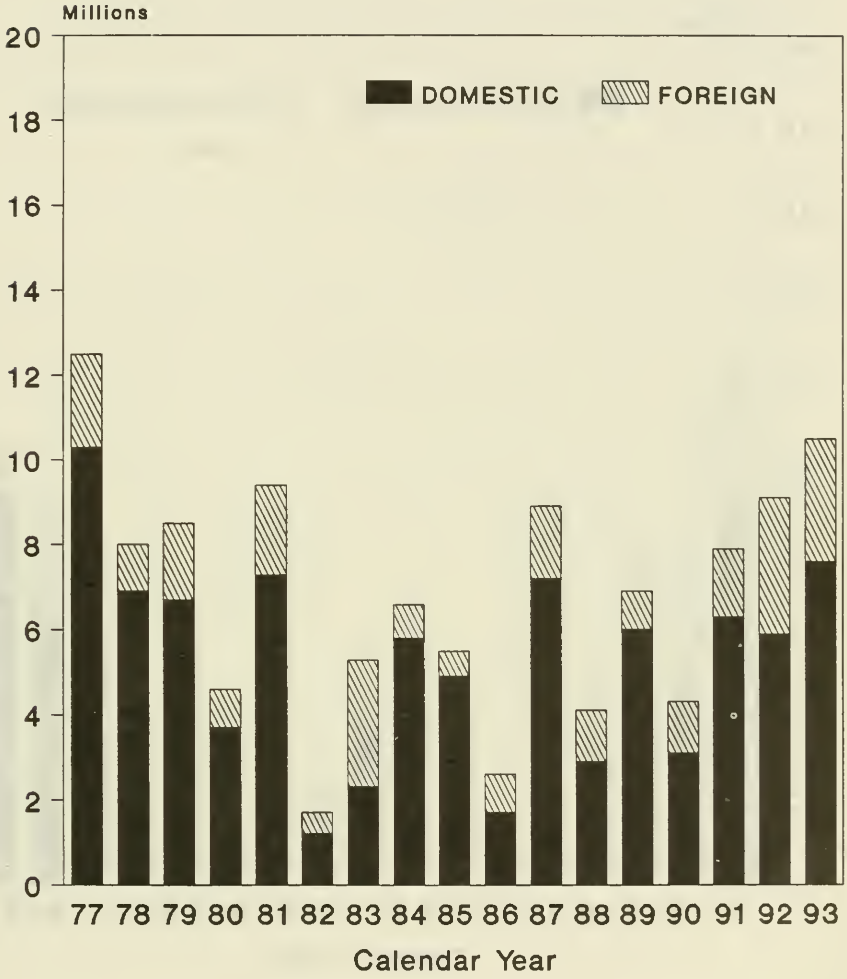


# ODI INFLUENCED RECALLS

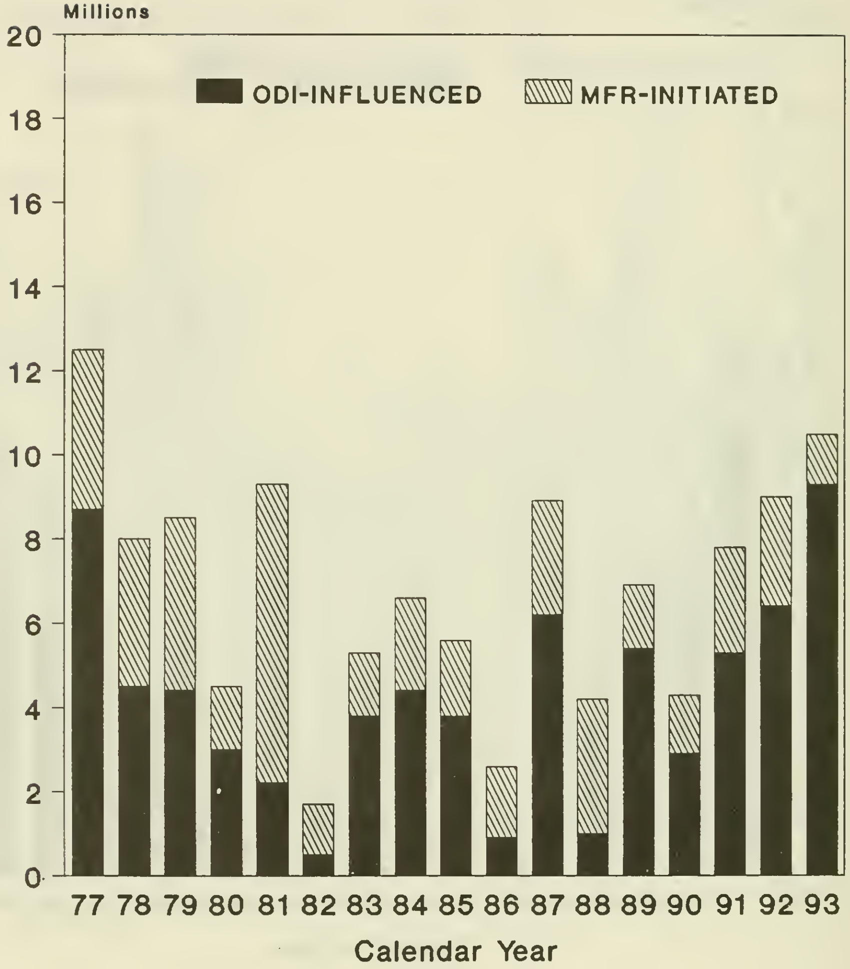
## (BASED ON NO. OF VEH. DEFECT RECALLS)



# NUMBER OF VEHICLES RECALLED
## DUE TO A DEFECT



# ODI INFLUENCE
## ON VEHICLES RECALLED



## COMPLIANCE TEST FAILURE DATA

Mr. Carr. Please update the data on compliance test failures shown on pages 325 through 327 of last year's hearing record.

[The information follows:]

| FMVSS No. | & DESCRIPTION | FY92 FAIL RATE (%) | FY93 FAIL RATE (%) |
|---|---|---|---|
| 103 | Windshield Defrosting & Defogging | 0 | NT |
| 104 | Windshield Wiping & Washing | 0 | NT |
| 105 | Hydraulic Brake System | 0 | 0 |
| 106 | Brake Hoses | 4 | 0 |
| 108 | Lamps, Reflective Devices, etc. | NT | 0 |
| 109 | New Tires-Passenger Cars | 0 | 0 |
| 110 | Tire Selection-Passenger Cars | 0 | 0 |
| 111 | Rearview Mirrors | NT | 0 |
| 116 | Hydraulic Brake Fluids | [a]80 | [b]77 |
| 118 | Power-operated Window Systems | 0 | NT |
| 119 | New Tires-Trucks & Buses | 0 | 0 |
| 120 | Tire Selection-Trucks & Buses | 0 | 0 |
| 122 | Motorcycles Brake Systems | 0 | 0 |
| 124 | Accelerator Control Systems | 0 | 0 |
| 125 | Warning Devices | [c]47 | NT |
| 201 | Occ. Protection In Interior Impact | NT | 0 |
| 202 | Head Restraints | 0 | 0 |
| 203 | Driver Impact Prot.-Steering Control | 0 | 0 |
| 204 | Strg Column Rearward Displacement | 0 | 0 |
| 206 | Door Locks and Retention Components | 0 | 0 |
| 207 | Seating Systems | 0 | 0 |
| 208 | Occupant Crash Protection | [d]19 | 0 |
| 209 | Seat Belt Assemblies | 0 | 0 |
| 210 | Seat Belt Assembly Anchorages | [e]14 | 0 |
| 212 | Windshield Mounting | 0 | 0 |
| 213 | Child Restraint Systems — | | |
| | Dynamic Tests | [f]12 | [g]24 |
| | Component Tests | 3 | 4 |
| 214 | Side Impact Protection — | | |
| | Static Tests | 0 | 0 |
| 216 | Roof Crush Resistance | 0 | 0 |
| 217 | Bus Window Retention and Release | 0 | [h]25 |
| 218 | Motorcycle Helmets | 10 | [i]53 |
| 219 | Windshield Zone Intrusion | 0 | 0 |
| 220 | School Bus Rollover Protection | NT | 0 |
| 222 | School Bus Passenger Seating | [j]33 | 0 |

(Continued on next page)

| | FMVSS No. & DESCRIPTION | FY92 FAIL RATE (%) | FY93 FAIL RATE (%) |
|---|---|---|---|
| 301 | Fuel System Integrity — | | |
| | Frontal Fixed Barrier Impact Tests | 0 | 0 |
| | Moving Barrier (MB) Rear Impact Tests | 0 | 0 |
| | School Bus MB Lateral Impact Tests | [k]40 | 0 |
| 302 | Flammability of Interior Materials | 0 | 0 |
| 581 | Bumper Standard | 0 | 0 |

NT = Not Tested

[a] Failures involved primarily labeling requirements

[b] 22 labeling failures and 1 performance failure

[c] 2 test samples failed the red reflectance test, 1 sample failed orange luminance test, and 4 samples failed the stability test

[d] 6 investigations for occupant: protection failures, 1 recall of 22,416 passenger cars

[e] Another conversion van failure, 1 investigation and a recall of 1,100 vehicles

[f] 5 investigations initiated with 1 recall involving 1,000,000 child restraints; investigations are continuing

[g] 10 investigations initiated with 5 recalls involving 1,185,000 child restraints; investigations are continuing

[h] Failure involved emergency exit labeling requirement

[i] Includes both performance and labeling failures.
2 investigations with 2 recalls involving 4,000 helmets

[j] 1 investigation where a school bus manufacturer's seats did not meet height specification by a small margin, resolved by agency granting manufacturer's inconsequentiality petition

[k] 2 test failures were combined in 1 investigation involving the same chassis manufacturer where 185,177 school buses were recalled for fuel tank leak failures

(Continued on next page)

FISCAL YEAR 1994

| | FMVSS No. AND TITLE | No. of TESTS | No. of ITEMS |
|---|---|---|---|
| 105 | Hydraulic Brake System | 7 | 7 |
| 106 | Brake Hoses | 30 | 495 |
| 108 | Lamps, Reflective Devices, etc. | 50 | 50 |
| 109 | New Pneumatic Tires-Pass. Cars | 100 | 200 |
| 110 | Tire Selection & Rims-Pass. Cars | 3 | 3 |
| 111 | Rearview Mirrors | 3 | 3 |
| 116 | Hydraulic Brake Fluids | 30 | 30 |
| 119 | New Pneumatic Tires-Trucks, Buses | 70 | 120 |
| 120 | Tire Selection & Rims-Trucks, Buses | 5 | 5 |
| 124 | Accelerator Control Systems | 11 | 11 |
| 131 | School Bus Pedestrian Safety Devices | 4 | 4 |
| 201 | Occ. Protection-Interior Impact | 8 | 8 |
| 202 | Head Restraints | 12 | 12 |
| 203 | Impact Protection For Driver From Steering Control System | 3 | 3 |
| 204 | Strg. Control Rearward Displacement | 35 | 35 |
| 206 | Door Locks & Door Retention Components | 25 | 150 |
| 207 | Seating Systems | 8 | 8 |
| 208 | Occupant Crash Protection | 35 | 35 |
| 209 | Seat Belt Assemblies | 40 | 120 |
| 210 | Seat Belt Assembly Anchorages | 5 | 5 |
| 212 | Windshield Mounting | 35 | 35 |
| 213 | Child Restraint Systems — | | |
| | Dynamic Tests | 49 | 150 |
| | FAA Inversion Tests | 49 | 97 |
| | Component Tests | 42 | 1470 |
| 214 | Side Impact Protection — | | |
| | Static Tests | 10 | 10 |
| | Dynamic Tests | 15 | 15 |
| 216 | Roof Crush Resistance | 6 | 6 |
| 217 | Bus Window Retention/Release | 4 | 4 |
| 218 | Motorcycle Helmets | 200 | 290 |
| 219 | Windshield Zone Intrusion | 35 | 35 |
| 220 | School Bus Rollover Protection | 4 | 4 |
| 222 | School Bus Passenger Seating | 4 | 4 |
| 301 | Fuel System Integrity — | | |
| | Frontal Fixed Barrier Impact Tests | 35 | 35 |
| | Moving Barrier Lateral Impact Tests | 6 | 6 |
| | Moving Barrier (MB) Rear Impact Tests | 11 | 11 |
| | School Bus MB Impact Tests | 3 | 3 |
| 302 | Flammability of Interior Materials | 10 | 240 |

Mr. CARR. Please provide the updated fiscal year 1995 compliance test program for the record and indicate why the selected standards were chosen for testing?

[The information follows:]

Approximately 30 of the 40 testable standards are included in each fiscal year's compliance testing program, and some of the standards are rotated so that all testable standards are included in at least one test program every five years. Standards for child restraint systems, occupant crash protection, motocycle helmets, hydraulic brakes, fuel system integrity, school bus seating, side impact protection, etc. are included in every testing program.

FISCAL YEAR 1995

| FMVSS Number and Title | Number of— | |
|---|---|---|
| | Tests | Items |
| 105—Hydraulic Brake System | 5 | 5 |
| 106—Brake Hoses | 30 | 495 |
| 108—Lamps, Reflective Devices, etc | 50 | 50 |
| 109—New Pneumatic Tires-Pass. Cars | 100 | 200 |
| 111—Rearview Mirrors | 4 | 4 |
| 116—Hydraulic Brake Fluids | 30 | 30 |
| 119—New Pneumatic Tires-Trucks, Buses | 70 | 120 |
| 120—Tire Selection & Rims-Trucks, Buses | 5 | 5 |
| 121—Air Brake Systems | 3 | 3 |
| 124—Accelerator Control Systems | 10 | 10 |
| 126—Truck-Camper Loading | 5 | 5 |
| 131—School Bus Pedestrian Safety Devices | 4 | 4 |
| 201—Occ. Protection-Interior Impact | 5 | 5 |
| 202—Head Restraints | 10 | 10 |
| 204—Strg. Control Rearward Displacement | 30 | 30 |
| 206—Door Locks & Door Retention Components | 26 | 156 |
| 207—Seating Systems | 5 | 5 |
| 208—Occupant Crash Protection | 30 | 30 |
| 209—Seat Belt Assemblies | 40 | 120 |
| 210—Seat Belt Assembly Anchorages | 5 | 5 |
| 212—Windshield Mounting | 30 | 30 |
| 213—Child Restraint Systems: | | |
| Dynamic Tests | 53 | 169 |
| FAA Inversion Tests | 52 | 52 |
| Component Tests | 46 | 1610 |
| 214—Side Impact Protection: | | |
| Static Tests | 7 | 7 |
| Dynamic Tests | 20 | 20 |
| 216—Roof Crush Resistance | 5 | 5 |
| 217—Bus Window Retention/Release | 4 | 4 |
| 218—Motocycle Helmets | 30 | 120 |
| 219—Windshield Zone Intrusion | 30 | 30 |
| 220—School Bus Rollover Protection | 4 | 4 |
| 222—School Bus Passenger Seating | 4 | 4 |
| 301—Fuel System Integrity: | | |
| Frontal Fixed Barrier Impact Tests | 30 | 30 |
| Moving Barrier Lateral Impact Tests | 7 | 7 |
| Moving Barrier (MB) Rear Impact Tests | 11 | 11 |
| School Bus MB Impact Tests | 3 | 3 |
| 302—Flammability of Interior Materials | 10 | 240 |

## CHILD SAFETY SEAT NONCOMPLIANCE

Mr. CARR. Fisher Price filed in November 1993 a petition with NHTSA requesting a determination that the noncompliance of certain child safety seats that do not meet Federal flammability requirements is inconsequential with regard to motor vehicle safety. As many as 3.3 million safety seats are at issue. What was

NHTSA's ruling in this case and what criteria are used to determine when a compliance failure has inconsequential safety impact?

[The information follows:]

NHTSA took action on the Fisher-Price petition for an inconsequentiality determination on March 22, 1994. However, pursuant to a temporary restraining order issued on March 25 by Judge John Curtin of the U.S. District Court for the Western District of New York, NHTSA is prohibited from "publishing, posting, announcing, making public, or in any other manner making known" its decision.

Regarding the criteria used to determine whether a noncompliance is inconsequential to safety, NHTSA has broad discretion to make these determinations on a case by case basis, as reflected in the National Traffic and Motor Vehicle Safety Act and the agency's regulations. When the noncompliance involves a mislabeling, the agency typically has applied a lenient standard of review, primarily assessing whether the mislabeling would inhibit manufacturer recall in the event of a defect or would confuse the consumer in following instructions or seeking replacement equipment.

However, when a performance noncompliance is involved, the agency employs a stricter standard of review because performance more directly affects injury prevention in crashes. Performance levels in Federal motor vehicle safety standards are arrived at based on analysis of accident data, research results, and information and views provided by affected public and private entities. NHTSA must seriously consider the effects of any deviation from a mandated performance level. Where the safety of children is involved, an even stricter standard is applied.

## COMPLIANCE TESTING—HELMETS

Mr. CARR. According to NHTSA, the passage of State mandatory motorcycle helmet laws has increased the sale of a large number of fake or novelty helmets. Now does NHTSA's compliance testing program address this problem?

[The information follows:]

Working with state and local law enforcement officials and other sources, we have identified several brands of the so-called "fake" or "novelty" helmets. Where possible, we have obtained samples of the suspect helmets and subjected them to the tests specified in Standard 218. In most cases these types of helmets failed dramatically to comply with the requirements of the standard. As a result of the agency tests, there have been two notification and remedy campaigns (recalls), one involving E & R Fiberglass of Tacoma, Washington, and the other involving Chico of Fort Lauderdale, Florida. In each case, the company has gone out of business after initiating the recall campaign. The agency is also conducting a similar investigation involving Frenchy's Worldwide Helmets of Pompano Beach, Florida. The agency is expanding the fiscal year 1994 program to include ambient condition testing of most helmet models in the marketplace. The results of these tests will be provided to the public and to state and local law enforcement officials.

## CIVIL PENALTIES ASSESSED AND COLLECTED

Mr. CARR. Please provide for the record the amounts in civil penalties assessed and collected for noncompliance in each year from fiscal year 1988 through fiscal year 1993, and estimated for fiscal year 1994.

[The information follows:]

The civil penalties assessed and collected for noncompliance for fiscal year 1988 through fiscal year 1993 and the estimate for fiscal year 1994 are as follows:

| Fiscal year: | |
|---|---|
| 1988 | $92,750 |
| 1989 | 76,200 |
| 1990 | 190,900 |
| 1991 | 118,500 |
| 1992 | 239,500 |
| 1993 | 235,800 |
| 1994 Estimate | 85,000 |

## NISSAN VAN RECALL

Mr. CARR. In February 1994, Nissan Motor Company announced that it would purchase all of the estimated 33,000 vans it sold from 1987 through 1990 because of potential engine fires. Does NHTSA believe that the vans have a safety-related defect?

[The information follows:]

A total of four safety recalls have been conducted to address engine compartment fires in these vehicles. Each recall involved failures of different systems and components. The fourth recall is comprehensive, and if installed according to Nissan's instructions, should eliminate any engine compartment fire from a manufacturing safety defect. These vehicles are getting older and are attaining mileages in excess of 100,000 miles. Under these circumstances, engine compartment fires could originate from various causes not related to manufacturing or design defects. These would include maintenance, nonstandard components, and general deterioration common to older vehicles with high mileage.

NHTSA does not believe that the Nissan vans have an inherent safety defect necessitating the repurchasement program. Rather, Nissan's repurchase offer is the result of field programs encountered during the installation of the recall remedy which posed potential safety-related programs.

Mr. CARR. NHTSA previously denied a petition asking NHTSA to order Nissan to repurchase all of the vans. What was NHTSA's role in Nissan's decision to repurchase the vans and do you support its repurchase offer?

[The information follows:]

When NHTSA accepted Nissan's fourth recall in May 1993 to remedy engine compartment fires in 1987–1990 vans, the agency stated it would closely monitor the recall and conduct a formal audit of the recall in fall 1993. As a result of these actions, NHTSA became aware of installation problems with the recall remedy which had potential safety consequences. In December 1993, NHTSA intensified its inspection of vehicles that had been remedied under the fourth recall and conducted an in-depth investigation of a fire that occurred in a Nissan van several days after the fourth recall work had been completed. By January 1994 NHTSA had met with Nissan officials to advise them of the agency's concerns about safety risks in the Nissan vans. The decision to repurchase the 1987–1990 Nissan vans is a product of NHTSA's monitoring of the fourth recall.

Under the National Traffic and Motor Vehicle Safety Act, a manufacturer may choose to repurchase a defective vehicle for the original purchase price, less a reasonable allowance for depreciation. The agency has concluded that the price to be offered by Nissan satisfies this criterion.

Mr. CARR. When were problems with the Nissan vans first reported?

[The information follows:]

The first recall was initiated in 1987 by Nissan and involved installing newly designed valve cover gaskets in approximately 10,000 1987 vans. NHTSA was not aware of any fires in the vans at that time. In late 1989, the first reports of engine compartment fires not directly attributable to oil leaks that resulted in the 1987 valve cover gasket recall were received by NHTSA. Subsequently, in July 1990, NHTSA initiated an investigation into engine compartment fires that appeared to be caused by failure of the power steering hoses.

Mr. CARR. How many vans has Nissan repurchased to date and how many are still registered for use in this country?

[The information follows:]

As part of the fourth recall, Nissan authorized its dealers to make a "repair equivalent cash offer" to owners of 1987–1990 Nissan vans that had market values below the cost to Nissan of the fourth recall as well as any other outstanding repairs for which Nissan would be liable. Under that program, Nissan has repurchased approximately 1,500 vans through the end of February. Additionally, since Nissan announced the repurchasement program in February 1994, approximately 2,500 Nissan van owners have requested expedited repurchasement.

Nissan originally produced and sold 33,314 model year 1987–1990 vans in the United States. However, a number of these vans have been scrapped or taken out of service for reasons other than Nissan's buy-back or engine fires. NHTSA estimates that there are 25,000–29,000 1987–1990 Nissan vans still available for use on the Nation's highways.

Mr. CARR. What feedback has NHTSA received from owners or others relating to the adequacy of Nissan's recall and repurchase efforts?

[The information follows:]

As part of the agency's audit of the fourth recall, questionnaires were sent to all owners of 1987–1990 Nissan vans in fall 1993. Both positive and negative feedback was received. Many owners appeared to be quite satisfied with the performance of the Nissan dealers in providing the recall service as well as the performance of their vans. However, there were also a number of owners who reported continuing dissatisfaction with Nissan, Nissan dealers, and their vans.

The Nissan repurchasement program announced in February 1994, begins in April 1994. While negative comments about the amount of money being offered to owners in the repurchasement program have been received from consumer groups and some Nissan owners, it appears that most owners are satisfied with either keeping their vans or selling them back to Nissan. Approximately 1,500 owners opted to sell their vans back to Nissan as part of a voluntary program in the fourth recall in which van owners were offered the cash equivalent of the cost of the recall and any other service and repair for which Nissan would be liable. Owners who sold their vans back to Nissan prior to Nissan's repurchasement program based on the NADA "Blue Book" value of the van will receive reimbursement from Nissan for any difference between the repair equivalent cash offer they received and the Blue Book value they would have been entitled to. This appears to be fair and equitable.

Mr. CARR. Does NHTSA believe that any further actions are needed by Nissan regarding these vans?

[The information follows:]

For those owners who choose to keep their 1987–1990 Nissan vans, Nissan needs to continue to monitor the performance of the recall remedy, as is the case in any safety recall.

### SAFETY OVERSIGHT OF NISSAN VANS

Mr. CARR. Does NHTSA believe that it provided appropriate safety oversight of this problem and, if so, please discuss why?

[The information follows:]

Yes. When engine compartment fires first occurred with any semblance of a trend, NHTSA initiated an investigation which resulted in a recall to correct the failure of the power steering hoses. When engine compartment fires were determined to occur in vehicles which appeared to have all the applicable recall work completed, NHTSA again initiated an investigation, which resulted in another recall. The notification and remedy campaign for this recall was begun in April 1992. On January 25, 1993, NHTSA was petitioned on the adequacy of the remedy of the Nissan engine compartment safety recalls. At that time, NHTSA did not have any reports of engine compartment fires in Nissan vans in which the recall work under the third recall had been completed. In accordance with NHTSA's procedures, an investigation of the allegations made in the petition was initiated. Subsequently it was learned that there had been engine compartment fires in vans which did have all the applicable recall work completed. The fires appeared to have been caused by overheating of the engine cooling system, resulting in failure of a freeze plug located at the rear of the cylinder head. On March 15, 1993, Nissan initiated a comprehensive recall which provided owners with a new, redesigned engine cooling system. The remedy also provided a comprehensive cooling system sensor and warning system to detect possible engine overheating, warn the operator of an impending problem, and to limit vehicle operation if the operator continued to drive the vehicle when overheating may be imminent.

NHTSA did not encourage repurchase of the vans at that time because the agency believes that the best course of action is to remedy a defective condition. A vehicle repurchasement program does not guarantee that all vehicles will be sold back to the manufacturer. If the known overheating condition was not addressed, then those vans not repurchased by Nissan would be in danger of an engine compartment fire due to overheating.

As events have occurred, Nissan is now offering to repurchase the vans. However, for those owners who choose to keep their vans, a comprehensive remedy has been developed, and if installed completely and correctly, should eliminate any engine compartment fires in these vehicles due to overheating.

In all cases, NHTSA's actions were timely, responsible, and consistent with all established agency policies.

### DEFECTS INVESTIGATIONS FUNDING

Mr. CARR. For fiscal year 1994, the amounts available for the Office of Defects Investigations increased by 40 percent. Please indicate how the $550,000 increase over the 1993 level for defects investigations will be used in the current fiscal year, and in fiscal year 1995.

[The information follows:]

The funds will be used in three areas. First, a methodology will be developed and utilized for analyzing real-world crash data to search for patterns indicating the possible existence of safety-related defects in various make/model motor vehicles. Second, comprehensive field inspections of motor vehicles will be conducted to determine if safety-related problems exist in on-the-road vehicles. Third, testing capabilities will be developed to assess safety problems related to the sophisticated vehicle electronics, computer controls, and various light-weight or composite materials in modern motor vehicles.

### SAFETY RECALL CAMPAIGNS

Mr. CARR. Why is an additional $179,000 needed for safety recall campaigns and how will the use of these funds differ than that proposed for defects investigations?

[The information follows:]

A critical part of the agency's efforts to remove unsafe vehicles and items of motor vehicle equipment from the roadways is its program to monitor safety recall campaigns (both defect and noncompliance recalls) to ensure that the recall remedy is adequate and recall completion rates are maximized. This post-recall program applies to all safety recalls—those initiated by the manufacturer and those influenced by NHTSA investigations. Specifically, NHTSA reviews all recalls to ensure that manufacturers meet all of the requirements of the National Traffic and Motor Vehicle Safety Act, implementing Federal regulations, and NHTSA policies. Analyses are conducted on the scope of the recall to ensure that it is appropriate and on the remedy to ensure that it is solving the safety problem. Analyses of recall completion rates are conducted on a quarterly basis to ensure that the recall is progressing at an acceptable rate. If NHTSA believes that a recall is not progressing at an acceptable rate, the recall population is inappropriate, or the recall remedy has not corrected the safety problem, the agency directs the manufacturer to take appropriate remedial actions.

In fiscal year 1993, NHTSA directed manufacturers to renotify vehicle owners in 12 recalls involving 2.5 million vehicles that had not been remedied. Additionally, the agency initiated 21 recall audits, 24 investigations of the adequacy of the recall remedy and the appropriateness of the recall scope, and 65 inquiries to manufacturers concerning service campaigns that appeared to involve safety-related problems or safety recalls in other countries. These actions resulted in 24 vehicle recalls involving nearly 1.2 million vehicles and 3 equipment recalls involving more than 79,000 items of motor vehicle equipment.

### AUTO SAFETY HOTLINE—CONSUMER AWARENESS

Mr. CARR. Last year, we were told that about $162,000 would be used to expand consumer awareness of the Auto Safety Hotline. Have these activities been completed and, if so, what have been the results?

[The information follows:]

The agency has already put into place a number of programs with national, regional, and local associations in various motor vehicle-related industries, individual companies, consumer networks, and the media which are designed to inform the public of the Auto Safety Hotline. Additionally, creative efforts involving electronic bulletin boards, direct mailings to Congressional staffs and state/local consumer affairs offices, incorporation of Hotline information in course curricula at the university level, etc., are underway.

While it is still early to measure the collective effect of these efforts, it is noted that the number of calls to the Hotline thus far in 1994 are more than 20 percent higher than the same period in 1993.

Mr. CARR. How much would be spent on public awareness activities during fiscal year 1995?

[The information follows:]

It is anticipated that a somewhat higher amount of funds will be spent in fiscal year 1995 to increase consumer awareness of the Auto Safety Hotline than was spent in fiscal year 1994. This results from the fact that additional equipment needed to respond to a higher number of consumer calls was purchased in fiscal year 1994.

### AUTO SAFETY HOTLINE—EXPANSION

Mr. CARR. Last year, we were told that about $162,000 would be used to expand the hotline itself with additional equipment and operators. Have these activities been completed?

[The information follows:]

In anticipation of increased consumer calls to the Auto Safety Hotline, the agency has purchased additional equipment and has a contract in process to hire part-time and full-time contractor staff to supplement the existing Hotline staff.

### AUTO SAFETY HOTLINE—CAPACITY/STAFFING

Mr. CARR. What is the current capacity of and staffing for the hotline, and what is planned for fiscal year 1995?

[The information follows:]

The current call handling capacity of the Hotline is approximately 550,000 calls per year. This includes, a 10 percent rate of "dropped calls", which are the result of callers not completing recorded requests for services or not waiting for assistance by Hotline personnel. In fiscal year 1995 NHTSA plans to add additional contractor personnel to handle the anticipated increase in calls resulting from the fiscal year 1994 program activities to promote consumer awareness of the Hotline for reporting safety problems on motor vehicles and items of motor vehicle equipment.

The current (fiscal year 1994) staffing for the Hotline is as follows: 1 Hotline Supervisor, full-time permanent, Federal personnel; 9 Contact Representatives, full-time permanent, Federal personnel; 1 Contact Representative, part-time permanent, Federal personnel; 3 Contact Representative, full-time, contractor personnel; 2 Transcribers, full-time, contractor personnel, on-site; 2 Transcribers, full-time, contractor personnel, off-site; 1 Student Aide, college level, half time.

### ODOMETER FRAUD PROGRAM

Mr. CARR. What are the recent achievements of the odometer fraud program?

[The information follows:]

From 1990 through 1993, NHTSA's Odometer Fraud Staff completed 95 investigations which substantiated odometer fraud. 73 cases were referred to the Department of Justice for criminal prosecution. NHTSA cases were responsible for 52 criminal convictions resulting in fines totaling $213,520, court awarded restitution for defrauded consumers totaling $94,000, and prison sentences ranging from six months to seven years. From 1989 through 1992, the State Enforcement Support Contract Program awarded contracts to 16 states totaling $400,000. While under contract, these states conducted seven statewide public awareness programs, 1,807 investigations, and recovered restitution totaling $419,020 for defrauded consumers.

Mr. CARR. The justifications refer to a continuing program to deter odometer fraud that includes investigating large scale odometer fraud schemes and encouraging and assisting State enforcement agencies. How are you able to conduct these activities with no contract funding for the program?

[The information follows:]

NHTSA conducts investigations of large-scale odometer fraud schemes unilaterally with minimal assistance from state enforcement agencies. In these cases, the assistance provided by state agencies is voluntary. From 1989 through 1993, contract funds were provided to four state enforcement agencies each year which served as "seed money" for the state to implement and maintain aggressive odometer fraud enforcement programs. Congress provided no contract funding for fiscal year 1994. The agency is continuing to encourage enforcement at the state level through effective liaison with state agencies and is providing assistance to those states that have elected to continue odometer fraud enforcement efforts.

### ODOMETER FRAUD PROGRAM—STAFFING

Mr. CARR. How many positions will be devoted to the odometer program in fiscal years 1994 and 1995?

[The information follows:]

Seven full time and one part time position will be devoted to the odometer fraud program in fiscal year 1994. No positions will be devoted to the program in fiscal year 1995.

### GRAY MARKET AUTOMOBILE IMPORTS—GAO REPORT

Mr. CARR. Please address the issues raised in the recent report of the General Accounting Office on "gray market" automobile imports, including NHTSA's response to the GAO's findings.

[The information follows:]

The GAO report found that NHTSA does a good job of verifying that vehicles the U.S. Customs Service identifies as permanent imports are modified to meet U.S. safety standards. Nonetheless, GAO maintains that further improvements are possible in program areas such as controls over temporary imports and ensuring that user fees cover program costs.

The GAO recommends that the Secretary of Transportation.

1. Evaluate the merits, including benefits, costs and potential alternatives, of modifying the Federal vehicle identification number (VIN) coding provisions to require a uniform VIN code to identify whether each vehicle was originally built to conform to U.S. safety standards.
2. Work with the safety group mandated by the Anti Car Theft Act of 1992 and the American Association of Motor Vehicle Administrators (AAMVA) to facilitate cooperation among state and Federal agencies to better identify and control the registration of gray market vehicles.
3. Determine whether NHTSA should seek authority to require the exportation of noncomplying vehicles and whether the level of fines for such vehicles should be increased.
4. Establish user fees sufficient to cover the registered importer programs's cost.
5. Ensure that all imported vehicles meet the same degree of compliance with safety standards and recalls for the correction of safety defects.
6. Improve the accuracy of the Federal data base for tracking gray market vehicles.

### DEPARTMENT OF TRANSPORTATION POSITION

Overall, the Department maintains that NHTSA is ensuring that gray market vehicles imported into the U.S. by registered importers (RI) are brought into compliance with Federal standards. The Importer Vehicle Safety Compliance Act of 1988 (the Act) provided NHTSA with greater control in administering and enforcing the gray market program. NHTSA now approves firms that are qualified to act as RIs based on an evaluation of facilities, staff, and knowledge of the modifications necessary to bring vehicles into compliance. Firms that act as RIs must obtain the necessary insurance policies to cover the cost of vehicle repairs under potential defect and noncompliance notification and remedy recall campaigns.

The GAO report highlighted areas in which NHTSA has already taken action to improve the gray market, vehicle program. To ensure that user fees cover program costs, NHTSA recognized the reduced program costs obtained through more efficient operations and took action to revise the fee structure. Vehicle manufacturers are being contacted to explore the potential for using existing VIN coding systems to better identify Canadian vehicles manufactured for the U.S. market without mandating costly changes. In addition, vehicle manufacturers verified that once they are notified that a Canadian vehicle is imported into the U.S., it is tracked in a manufacturer's system as a U.S. vehicle for recall purposes. NHTSA revised its import approval form letter to highlight the importance of keeping the vehicle manufacturers informed of the vehicle owner's current address so that they can be contacted in the event of a recall. The forms used by the U.S. Customs Service for the gray market vehicle program have been revised to better track imported vehicles from Canada. NHTSA and the U.S. Customs Service are working together to improve documentation and to make record movement between the agencies more efficient and effective. Finally, NHTSA is working with the AAMVA to identify methods to work more effectively with the states on gray market vehicle registration issues.

## NATIONAL DRIVER REGISTER PROGRAM AUTHORIZATION

Mr. CARR. What is the fiscal year 1995 authorization for the National Driver Register Program?

[The information follows:]

The Department has requested $3.4 million for operation of the NDR during fiscal year 1995.

The 1995 NHTSA Budget request for the National Driver Register program assumes reauthorization of the program under the Highway Trust fund and reauthorization language is included in the General Provision Section. The reauthorization would continue the drawdown of funds from the Section 402 program. Furthermore, the reauthorization includes $2.6 million which, together with $850 thousand of unobligated balances, will provide an authorized level of $3.4 million of contract authority for FY 1995.

## PROBLEM DRIVER POINTER SYSTEM CONVERSION

Mr. CARR. What progress are states making in transitioning to the Problem Driver Pointer System (PDPS)? Which states have not yet made the conversion?

[The information follows:]

All states have formally agreed to participate under the PDPS and have received technical assistance grants to convert to the new system. Representatives from each state have attended two technical training workshops. To date, NHTSA has provided on-site technical assistance to 28 states. The PDPS central site software was released for testing in November 1993 and 8 states are currently testing their systems.

Mr. CARR. NHTSA's Priority Plan includes a goal of 39 states participating in the PDPS by the end of fiscal year 1994. Will NHTSA meet that goal?

[The information follows:]

NHTSA plans to release the PDPS for full operation in June 1994. At that time, states will join the PDPS as soon as they are ready. NHTSA expects to add at least one state per week, with at least 16 states participating by the end of the fiscal year.

## NATIONAL DRIVERS REGISTER GOALS

Mr. CARR. What are NHTSA's specific goals for the NDR program during fiscal year 1995?

[The information follows:]

NHTSA's goals are to have all states operating under PDPS during fiscal year 1995 and to begin the transfer of the Help Desk and Data Center functions to AAMVA.

## STATE LICENSING INFORMATION SYSTEMS INTEGRATION

Mr. CARR. The justifications indicate that NHTSA will be working with FHWA and the American Association of Motor Vehicle Administrators (AAMVA) to review all state licensing information systems to determine how these systems can be integrated. What specific issues will be reviewed in this project and what is your timetable for completing the review?

[The information follows:]

The review will examine whether the systems have overlapping functions that should be eliminated; whether these systems should exist separately or be combined into one system (possibly an all-drivers pointer system); what are logical roles for the State and Federal governments in operating these systems; how should the systems be funded; and what legislation, if any, would be necessary to implement any recommended changes. The review is expected to take from 18 to 24 months.

Mr. CARR. What financial contribution are FHWA and AAMVA making toward the cost of the review?

[The information follows:]

FHWA and AAMVA will contribute staff time. NHTSA will fund the study.

Mr. CARR. What known barriers are there to the integration or consolidation of the NDR, the commercial driver licensing system, and the driver license compact?

[The information follows:]

New legislation or amendments to existing legislation would be required. Although CDLIS and PDPS are quite similar, they are mandated under two different statutes and have different requirements. For example, PDPS users are strictly limited to those specified in the NDR Act, while CDLIS has more flexibility in terms of who can use the information. The Driver License Reciprocity System (Compact) is not federally mandated and, thus, the states do not necessarily feel the urgency to participate in that system. In addition, integration of the systems would require a significant systems design and programming effort and could be quite costly. The study of all state licensing information systems will consider all of these issues.

## NDR—REDUCING NHTSA INVOLVEMENT

Mr. CARR. In July 1993, NHTSA submitted a report to the Appropriations Committees regarding whether NHTSA's involvement in the NDR program could be reduced. What are the key issues identified by NHTSA concerning the possible transfer of responsibility for operating all or part of the NDR to the AAMVA?

[The information follows:]

The key issues concerning the possible transfer to AAMVA of responsibility for operating the data center and Help Desk are: Will a transfer help the states by moving system management closer to the major system users and by allowing closer cooperation between the NDR and CDLIS systems? Will a transfer increase or decrease NDR and CDLIS system service levels and reliability? Will a transfer help or hinder NDR service to non-state users, such as the FAA and the FRA? Will a transfer protect data security and confidentiality? How should the transferred functions be funded? What legislation is necessary to effect a transfer?

NHTSA believes that transferring the data center and Help Desk to AAMVA will help the states and increase service levels with no degradation of system reliability, service to non-state users, or data security and confidentiality. The transferred functions should be funded through user fees. Legislation is necessary to authorize the Secretary of Transportation to assign these functions to AAMVA.

Mr. CARR. NHTSA's report indicates that two NDR activities—the data center and the help desk—could and should be transferred to the AAMVA, but the report stops short of recommending transfer of the entire program to the States. What would be the disadvantages of transferring responsibility for operating the entire program to the AAMVA, with NHTSA retaining responsibility for Privacy Act requirements, after fiscal year 1995 when the PDPS will be fully implemented?

[The information follows:]

A complete transfer of NDR responsibility to AAMVA raises several questions. Those questions include whether reduced responsiveness to non-state users (FAA, FRA, USCG, etc.). It could also reduce the NDR's accountability to Congress. Another key issue is whether a complete transition would limit NHTSA's ability to exercise oversight and leadership in driver licensing generally.

NHTSA believes that the broad question of driver licensing system goals and strategy is a much more important issue. In the July 1993 Report to Congress, NHTSA recommended that FHWA, AAMVA, and NHTSA conduct a joint review of all state licensing information systems. This review should be conducted before any further NDR changes are proposed.

Mr. CARR. What is the position of the AAMVA with regard to the possible transfer of the operational responsibility of the NDR to that organization?

[The information follows:]

AAMVA's position is that responsibility for operating the data center and the Help Desk would give them an opportunity to serve their constituency better. A single data center for both CDLIS and NDR would provide economies of scale in contracting for timesharing services. Direct control of the NDR data center also would benefit the states by allowing them to change service levels quickly, if needed. A single Help Desk to address questions involving CDLIS, NDR, and DLR would provide one set of experts that know how the various systems interrelate and would facilitate coordinated solutions to driver licensing problems.

Mr. CARR. NHTSA's report estimates that approximately $491,000 would be required for NHTSA management oversight of the NDR if the program were transferred in its entirety, excluding privacy requirements, to the AAMVA. What was the basis for this estimate?

[The information follows:]

The estimate assumed that all NDR functions would be transferred to AAMVA, including privacy requirements support. The estimate represents salaries and overhead for four full-time staff for NHTSA management oversight.

### NDR—FTE ALLOCATION

Mr. CARR. How many full-time equivalents are allocated to the NDR program in fiscal year 1994 and what is your estimate for fiscal year 1995?

[The information follows:]

There are 12.6 FTE's allocated to the program for fiscal year 1994. The requested allocation remains the same for fiscal year 1995.

### NDR—LEGISLATIVE CHANGES

Mr. CARR. What legislative changes in the National Driver Register Act of 1982 would be needed to facilitate transfer of operational responsibility for the NDR to the AAMVA?

[The information follows:]

Legislation must be passed specifically authorizing the Secretary of Transportation to assign these functions to AAMVA.

### CDLIS USER FEE SYSTEM

Mr. CARR. Please elaborate on the Commercial Drivers License Information System (CDLIS) user fee system and its applicability to the NDR?

[The information follows:]

Under the CDLIS, the states are assessed fees based on the number of records they have in the system. With legislative authority, this also could be done for the NDR. However, full participation in the NDR is not mandatory as it is for CDLIS. Therefore, a different method of assessing user fees may be needed for the NDR in order not to discourage full participation.

Mr. CARR. Your report also suggested that states would incur an average of $54,000 in additional costs if a user fee system were implemented for the NDR. What was the basis for this estimate?

[The information follows:]

The estimate is based on the estimated total cost for AAMVA to operate the NDR, which is $2,759,000, divided by 51 jurisdictions.

Mr. CARR. NHTSA's report suggests that states should be provided a three-year transition period before being required to pay user fees for the NDR. How did NHTSA reach this conclusion?

[The information follows:]

When NHTSA discussed the report's conclusions with AAMVA's Board of Directors, AAMVA strongly urged that a transition period for the user fees be allowed so that the states could make necessary legislative and budgetary changes. Each state would have to determine the method of collecting this user fee (i.e., general fund, licensing fee, etc.). In most states, legislation would be needed to authorize fee collection and budget changes. Since the legislatures in several states meet on a biennial basis, this process could take up to three years.

### NDR—TRANSFER PLANNING ACTIVITIES

Mr. CARR. What additional planning activities has NHTSA conducted to move toward a transfer of the NDR to the AAMVA?

[The information follows:]

NHTSA is currently drafting legislation for the transfer of two NDR functions to AAMVA and has developed an implementation plan to transfer these functions.

### NDR—UNOBLIGATED CARRYOVER FUNDS

Mr. CARR. What was the reason for the large carryover of unobligated funds from fiscal year 1992 to fiscal year 1993 for the National Driver Register Program?

[The information follows:]

The carryover funds were allocated for grants to states and territories to assist their PDPS implementation. Only twelve states submitted their applications in time to be awarded in fiscal year 1992. Grants for the remaining 38 states and the District of Columbia were awarded in fiscal year 1993. None of the U.S. territories applied for the grant funds that were available to them.

Mr. CARR. What is your projected unobligated balance for the NDR at the end of fiscal year 1994?

[The information follows:]

NHTSA does not anticipate any unobligated balance of fiscal year 1994 funds for the NDR.

### SECTION 402 PROGRAM

Mr. CARR. The justifications indicate that "Section 402 dollars resulted in potential cost savings attributed to lives saved of $8.8 billion, a benefit cost ratio of over 33:1." How was this benefit cost ratio determined?

[The information follows:]

The key word in this material in the budget justification is potential. It was not intended to imply that the 1992 program would save the $8.8 billion in 1992, but rather that the 1992 program would contribute to this level of savings. The Section 402 program includes a number of programs that are designed to reduce the number of deaths and injuries on the nation's highways, including reduction in alcohol-related fatal crashes, increasing the use of occupant restraints, and reducing speeding. An estimate was made that if realistic goals could be achieved for these programs by the year 2000, 12,500 lives a year would be saved. In its September 1992 publication "The Economic Cost of Motor Vehicle Crashes," the agency estimated that in 1990 economics the cost of a fatality was approximately $700,000. Multiplying 12,500 lives by the $700,000 results in an annual cost saving of $8.8 billion. Dividing that amount by the $260 million program cost yields a benefit: cost ratio of more the 33:1.

### SECTION 402—NATIONAL PRIORITY AREAS

Mr. CARR. What are the national priority areas for the Section 402 State and Community Grant Program?

[The information follows:]

The eight (8) priority program areas for the Section 402 State and Community Grant Program are as follows: Occupant Protection, Alcohol and Other Drug Countermeasures, Police Traffic Services, Emergency Medical Services, Traffic Records, Motorcycle Safety, Pedestrian and Bicycle Safety, and Roadway Safety.

As required by ISTEA, NHTSA published a Notice of Proposed Rulemaking (NPRM) on January 14, 1994, to solicit public comment on adding School Bus Safety and Speed Control to the Section 402 national priorities. The 45 day comment period ended February 28, 1994; NHTSA is currently reviewing comments.

Mr. CARR. Are states mandated to address each of the national priorities or do they have flexibility to address only some of the priorities?

[The information follows:]

States are not mandated to address each of the national priority programs. States are encouraged to address their unique highway safety problems with any reasonable countermeasure to contribute to a reduction in highway deaths, injuries, and resulting health care costs.

### SECTION 402: ALCOHOL AND OCCUPANT PROTECTION ALLOCATION

Mr. CARR. Will States be required to allocate certain Section 402 resources for alcohol and occupant protection activities in support of the Secretary's combined safety belts/alcohol initiative?

[The information follows:]

A significant feature of the combined alcohol/safety belt initiative is its flexibility. The program uses a "bottoms-up" approach and empowers the states to decide for themselves where their resources will be placed in both the alcohol and occupant protection areas. The states have been asked to set their own alcohol and safety belt use goals in support of the Secretary's initiative. However, as alcohol and safety belts are significant priority areas, the states continue to address them in their highway safety plans and conduct numerous activities in this effort.

### SECRETARY'S COMBINED SAFETY BELT/ALCOHOL CAMPAIGN

Mr. CARR. What role did the States have in the establishment of the Secretary's combined safety belt/alcohol goals for 1997?

[The information follows:]

The agency reviewed each state's highway safety plan and used the information to provide the basis for developing belt and alcohol goals. Trend data was then correlated with the aggregate of state data to establish the national goals.

## COMBINED CAMPAIGN—INDIVIDUAL STATE GOALS

Mr. CARR. Have states set their own individual goals which underlie the national goal of 75 percent seat belt use and 43 percent alcohol-related fatalities and, if so, please provide a table which lists the goals for each state?

[The information follows:]

Safety Belt Usage/Alcohol-Related Fatality Goals
(compiled 3/94)

| State | Safety Belt Goal | Alcohol Goal |
|---|---|---|
| Alabama | 75 | 43 |
| Alaska | 75 | 43 |
| Arizona | 75 | 43 |
| Arkansas | 75 | 43 |
| California | 85 | 43 |
| Colorado | 75 | No goal |
| Connecticut | 75 | 43 |
| Delaware | 70 | 40 |
| District of Columbia | 70 | 40 ** |
| Florida | 75 | 38 |
| Georgia | 75 | 43 |
| Hawaii | 85 | 43 |
| Idaho | 67 | No goal |
| Illinois | 75 | 36 |
| Indiana | 76 | 36 |
| Iowa | 75 | 43 |
| Kansas | 75 | 32 ** |
| Kentucky | 75 | 35 |
| Louisiana | 75 | 43 |
| Maine | No goal | 40 ** |
| Maryland | 85 | 30 |
| Massachusetts | 45 | 53 ** |
| Michigan | 75 | 35 |
| Minnesota | 60 | 34 |
| Mississippi | 50 | 43 |
| Missouri | 80 | 45 ** |
| Montana | 78 | 53 ** |

| | | |
|---|---|---|
| Nebraska | 70 | 29 ** |
| Nevada | 75 | 43 |
| New Hampshire | 75 | 31 ** |
| New Jersey | 75 | 31 ** |
| New Mexico | 85 | 50 ** |
| New York | 75 | 36 |
| North Carolina | 85 | 39 |
| North Dakota | 50 w/law<br>35 wo/law | No goal |
| Ohio | 70 | 30 |
| Oklahoma | 75 | 43 |
| Oregon | 80 | 43 |
| Pennsylvania | 70 | 43 ** |
| Rhode Island | 75 | 43 |
| South Carolina | 75 | 38 |
| South Dakota | 50 | 38 ** |
| Tennessee | 75 | No goal |
| Texas | 75 | 60 ** |
| Utah | 65 | 30 ** |
| Vermont | 75 | 43 |
| Virginia | 75 | 38 ** |
| Washington | 90 | 51 ** |
| West Virginia | 75 | 36 ** |
| Wisconsin | 78 | 39 |
| Wyoming | No goal | No goal |
| Total | 75% | 43% |

** States that derived their own estimate for an alcohol goal. Some stated a percentage of reduction, rather than a targeted goal; others preferred to use DWI fatalities as a benchmark. All other states accepted the NCSA estimate for their goal.

### SECTION 402—UNDER AGE DRINKING ALLOCATION

Mr. CARR. For fiscal year 1994, the Committee directed that the $8 million increase provided for the Section 402 program be allocated entirely to underage drinking and driving. How was this directive implemented?

[The information follows:]

Last spring, as soon as the House Appropriations report indicated that Congress was planning to set aside $8 million of the $123 million FY 1994 Section 402 program for programs directed at underage drinking and driving, the agency computed the formula allocation to each state and advised the states accordingly. As states were developing their annual highway safety plan (HSP), detailing how they would use their FY 1994 Section 402 funds, many developed a special category of youth alcohol projects in anticipation of final Congressional action on the budget. Many states had their special youth alcohol plan prepared early enough to be approved and funded with the rest of the HSP on October 1. Other states have prepared and submitted amendments to their HSP's covering these youth alcohol activities. Information on innovative state projects has been provided to the states.

Mr. CARR. Did all the States utilize the additional funds and how difficult was it for them to do so?

[The information follows:]

Most states prepared plans to utilize the targeted funds with no difficulty. Other states had their highway safety plans for FY 1994 set in place before the Congressional decision to set-aside funding for youth alcohol. They are developing their new program now. All states intend to have their plan in place and the set-aside funds obligated before the end of the fiscal year.

Mr. CARR. What new state activities are being conducted as a result of this directive?

[The information follows:]

Following are examples of new youth alcohol programs that have been developed by states to address underage drinking and impaired driving using the set aside Section 402 monies.

*U.S.-Canada Border Project* (Michigan)—A lower drinking age in Ontario, Canada, lures a considerable number of American youth over the border. Training will be provided for border guards to look for intoxicated people and detain them for law enforcement officers.

*Kids Teaching Kids* (North Dakota)—This program, which was highly successful in teaching older elementary school students to teach younger children about alcohol-impaired driving and the need to use safety belts, will be initiated in new locations. To date, 690 peer leaders have taught over 7,100 elementary school children on alcohol and safety belt programs.

*Workplace Program for Under 21 Employees* (Massachusetts and Mississippi)—Specific activities would include surveying industries to determine where most of the youth are employed, determine what activities and resources are currently active, and developing additional resources for employers. Training would be provided to assist the businesses in implementing ongoing programs for their young employees.

*Alcohol Reduction Task Force (SMART–T)* (New Jersey)—This program consists of procedures to be followed by enforcement officers of member communities dealing with underage users of alcohol and drugs. All information concerning hangouts, places of purchase, parties, potential trouble spots, etc. are shared within the community. In addition, the Police Chiefs within the county have drafted procedures directing officers in their commands to formalize all incidents of alcohol use by underage consumers.

*Family Involvement Education Program* (Michigan)—Minority youth who are engaging in underage drinking will be targeted through a family involvement education program. The program will target parents of youth involved in underage drinking and will consist of two eight week sessions. An evaluation measuring the impact of the education program on the participant's attitudes and knowledge will also be conducted by the program coordinators.

Mr. CARR. For fiscal year 1995, NHTSA is requesting $123 million for the Section 402 program. Should the committee continue to direct that the $8 million added last year be devoted to youth alcohol-related activities in support of the Secretary's alcohol initiative?

[The information follows:]

The Committee should maintain the $123 million funding level for FY 1995 without the earmarking. This will provide states with maximum flexibility to use these funds where most needed. We expect some states will continue to spend a significant portion of their Section 402 funds on underage drunk driving programs, but each state can decide where best to put their dollars to meet their goals in occupant protection and impaired driving and to meet other critical needs.

## SECTION 402—PERFORMANCE-ORIENTED ALLOCATION FORMULA

Mr. CARR. Currently, Section 402 funds are allocated to states based on population and road mileage. What consideration has NHTSA given to developing a performance-oriented allocation formula under which a part of the funds would be allocated based on states achieving certain performance goals? What would be the advantages and disadvantages of such an allocation formula?

[The information follows:]

While NHTSA has given consideration to developing performance-oriented criteria for special incentive grants, the agency has not considered this for the Section 402 program. The Section 402 formula program provides every state with a base level of funding to assure that a highway safety program exists that can address the full spectrum of safety problems in that state. If this base program was allocated on a performance basis, states that have higher fatality and injury rates would get less funding. However, these are the states that need this funding the most.

Administering a performance-based allocation for a portion of the Section 402 funds would be complex, since performance measures are difficult to identify and to measure. Since the 402 program covers such a wide range of safety areas, how would performance be measured? (i.e. statewide highway fatality rate? statewide injury rate? safety belt usage rate? alcohol involved fatality rate? a combination?). Also, it would be necessary to standardize the methodology for obtaining every measurement, so that a fair comparison between states could be made.

## HIGHWAY SAFETY PROGRAM—STATE EXPENDITURES

Mr. CARR. Please provide State-by-State information on State expenditures, excluding Section 402 grants, for highway safety programs.

[The information follows:]

| STATE | STATE EXPENDITURES |
|---|---|
| ALABAMA | $54,000,000 |
| ALASKA | $60,000,000 |
| AMERICAN SAMOA | $14,436,282 |
| ARIZONA | $170,000,000 |
| ARKANSAS | $360,000,000 |
| CALIFORNIA | $3,100,000,000 |
| COLORADO | $78,000,000 |
| CONNECTICUT | $64,400,400 |
| DELAWARE | $22,300,000 |
| DIST. OF COLOMBIA | $22,500,000 |
| FLORIDA | $230,500,000 |
| GEORGIA | $94,300,000 |
| GUAM | $14,436,282 |
| HAWAII | $43,000,000 |
| IDAHO | Not Available |
| ILLINOIS | $246,100,000 |
| INDIANA | $96,450,000 |
| IOWA | $71,000,000 |
| KANSAS | $52,630,000 |
| KENTUCKY | $85,100,000 |
| LOUISIANA | $132,000,000 |
| MAINE | $46,500,000 |
| MARYLAND | $62,636,168 |
| MASSACHUSETTS | $102,739,468 |
| MICHIGAN | $106,200,000 |
| MINNESOTA | $135,280,000 |
| MISSISSIPPI | $40,000,000 |
| MISSOURI | $78,900,369 |
| MONTANA | $60,000,000 |
| NEBRASKA | $151,130,739 |
| NEVADA | $58,000,000 |
| NEW HAMPSHIRE | $41,972,500 |
| NEW JERSEY | $256,000,000 |
| NEW MEXICO | $156,000,000 |
| NEW YORK | $339,461,073 |
| NORTH CAROLINA | $126,000,000 |
| NORTH DAKOTA | $32,000,000 |
| NO. MARIANAS | $14,436,282 |
| OHIO | $174,330,534 |
| OKLAHOMA | $243,000,000 |
| OREGON | $181,000,000 |
| PENNSYLVANIA | $350,000,000 |
| PUERTO RICO | $80,000,000 |
| RHODE ISLAND | $33,948,418 |
| SOUTH CAROLINA | $60,800,000 |
| SOUTH DAKOTA | $34,000,000 |
| TENNESSEE | $62,000,000 |
| TEXAS | $1,500,000,000 |
| UTAH | $42,000,000 |
| VERMONT | $34,528,966 |
| VIRGIN ISLANDS | $14,436,282 |
| VIRGINIA | $392,000,000 |
| WASHINGTON | $300,000,000 |
| WEST VIRGINIA | $20,000,000 |
| WISCONSIN | $88,300,000 |
| WYOMING | $18,000,000 |

## DEVELOPMENT AND IMPLEMENTATION OF STATE PROGRAMS

Mr. CARR. Some states have complained that some NHTSA regional offices are too involved in the development and implementation of State programs. What is the role of the regional offices in this regard and how do you know when they are satisfactorily fulfilling that role?

[The information follows:]

One of the key responsibilities of NHTSA's regional offices is management and oversight of the grant programs. Prior to approving grant funding, the regional staff must be assured that the state has analyzed their critical highway safety problems and developed appropriate programs to address these problems. In addition, the regional staff is responsible for informing states of new Congressional and Administration programs and encouraging state involvement in them. To assist the states, the regional staff provides technical assistance in the form of program ideas, printed or audio-visual materials, and training.

At least once a year, each Region brings key representatives from State Highway Safety Offices together with headquarters officials. At these meetings, the State and Federal officials discuss outstanding issues and priorities. Feedback is sought from the States on all aspects of the regional program. When problems are surfaced, headquarters and regional officials work with the States to resolve them.

Mr. CARR. How are disputes between the States and the regions resolved?

[The information follows:]

NHTSA regulations provide that states may appeal decisions by regional officials concerning implementation of their highway safety grant programs. Appeals from the Governor's Highway Safety Representatives are made to the NHTSA Associate Administrator for Regional Operations or to the FHWA Regional Administrator with jurisdiction over the specific division, as appropriate.

## SECTION 402—INSPECTOR GENERAL AUDIT

Mr. CARR. The Inspector General has completed an audit of Region VI's oversight of the Section 402 program and has recommended that the Texas and Oklahoma highway traffic safety programs be designated as high risk. Please provide information indicating the steps NHTSA is taking to respond to each of the recommendations of the Inspector General.

[The information follows:]

The Office of Inspector General (OIG) conducted an audit between April and November of 1993 and issued an audit report in February 1994. Although no material weakness was identified, the OIG concluded in its report that Oklahoma and Texas had not implemented reliable management systems for administering highway safety program grants and had incurred unsupported and ineligible costs.

In response, NHTSA's Region VI Regional Administrator sent a copy of the audit report to the Governor of each State and wrote to the Governors' Highway Safety Representatives (GR's) notifying them that their States' highway safety programs were under "high-risk" status due to the audit. The Regional Administrator (RA) subsequently met with each GR in early March 1994 to develop a plan for working with the States to find documentation to support the costs identified as ineligible and unsupported and a plan to correct management problems. Also, as a result of the high risk designation, the RA discussed with each State the special conditions that will be established on their grant programs until the program and fiscal management of their systems improves.

Both States have been cooperative. In April the NHTSA Region VI will meet with both States to discuss documentation needed to support questioned costs and reimbursement issues.

Currently, no other States are designated as "high risk."

## SECTION 402—CONTRACT AUTHORITY

Mr. CARR. Please provide a table showing the amount of prior year contract authority carried over into subsequent fiscal years for the Section 402 program, for fiscal years 1991 through 1994.

[The information follows:]

### SECTION 402 STATE AND COMMUNITY FORMULA GRANTS

[In thousands of dollars]

| | Fiscal year— | | | |
|---|---|---|---|---|
| | 1991 | 1992 | 1993 | 1994 |
| Unused contract authority beginning of year | $110,910 | $122,257 | $130,257 | $158,257 |
| New contract authority | 126,000 | 126,000 | [1] 143,000 | [1] 143,000 |
| Reduction in contract authority | | | | [2] – 178,257 |
| Less: obligations | – 114,653 | – 118,000 | – 115,000 | – 123,000 |
| Unused contract authority, end of year | 122,257 | 130,257 | 158,257 | |

[1] Authorized level of $171 million is reduced by authorized deductions of $24 million for the Section 153 grant program and $4 million for the National Driver Register program.

[2] Reduction pursuant to rescission provision included in the Emergency Supplemental Appropriations Act of 1994 (P.L. 103–211, enacted February 12, 1949). This provision rescinds the amount of unused contract authority which exceeds the FY 1994 obligation limitation of $123 million.

## SECTION 402—GRANT OBLIGATIONS

Mr. CARR. Please update the table on Section 402 grant obligations as shown on page 344 of last year's hearing record by deleting 1989 and adding 1995.

[The information follows:]

## SECTION 402 GRANT OBLIGATIONS

(In Thousands of Dollars)

| | Fiscal Year | | | | | |
|---|---|---|---|---|---|---|
| Program Area | 1990 | 1991 | 1992 | 1993 | 1994[1] | 1995[1] |
| Alcohol Safety | 38,686 | 38,354 | 31,811 | 31,050 | *39,000 | 39,000 |
| Police Traffic Svcs | 37,270 | 37,897 | 41,274 | 35,256 | 36,330 | 36,330 |
| Emergency Medical Svcs | 2,035 | 3,625 | 3,361 | 4,075 | 3,366 | 3,366 |
| Occupant Protection | 18,344 | 17,101 | 20,997 | 22,518 | 22,013 | 22,013 |
| Traffic Records | 5,855 | 6,268 | 5,791 | 5,846 | 6,645 | 6,645 |
| Motorcycles | 664 | 444 | 737 | 1,083 | 774 | 774 |
| All Other | 6,916 | 5,888 | 8,876 | 10,019 | 9,719 | 9,604 |
| Grant Administration | 4,885 | 5,078 | 5,153 | 5,153 | 5,153 | 5,268 |
| **TOTAL** | **114,655** | **114,655** | **118,000** | **115,000** | **123,000** | **123,000** |

[1] The table reflects an estimated distribution of obligations based on current information and extrapolated to total amounts. The actual distribution of obligations will be determined by the States.

*For FY 1994, Congress specified an $8M set-aside for youth alcohol programs.

## HIGHWAY TRAFFIC SAFETY GRANTS—LIQUIDATING CASH APPROPRIATIONS

Mr. CARR. Your estimated need for liquidating cash appropriation for highway traffic safety grants is $151 million in fiscal year 1995. Please provide a table that shows the estimated carryover of unused liquidating cash appropriations for the prior year, the estimated outlays to be paid during fiscal year 1995, and the additional amount assumed to be needed to maintain sufficient balances and carryover into the next fiscal year.

[The information follows:]

[In thousands of dollars]

| | Fiscal year— | |
|---|---|---|
| | 1994 | 1995 |
| Unexpended liquidating cash appropriation, start of year | 29,952 | 28,086 |
| New liquidating cash appropriations | 138,550 | 151,000 |
| Outlays | 140,416 | 149,632 |
| Unexpended liquidating cash appropriations, end of year | 28,086 | 29,454 |

Note.—With a liquidating cash appropriation of $151 million in FY 1995, there is projected to be an unexpended liquidating cash balance of $29.454 million at the end of FY 1995, which is about 20 percent of the level of projected FY 1995 outlays.

## ALCOHOL PROGRAM REQUEST

Mr. CARR. You are requesting $6.767 million for the alcohol program in fiscal year 1995. Please explain how the request implements the Secretary's alcohol initiative.

[The information follows:]

The Secretary has challenged NHTSA to meet performance goals in both impaired driving and safety belt use: to reduce alcohol-related traffic fatalities to 43% of all traffic fatalities and to increase safety belt use to 75% by 1997. In response to this challenge, NHTSA has developed a combined alcohol/safety belt program funded in both the alcohol and occupant protection budgets. NHTSA encourages states to set their own goals and to develop personalized strategies to achieve these goals, making use of NHTSA's program materials and other assistance.

Almost all of the alcohol budget will be used in direct support of the combined program, by funding program development, technology transfer, information dissemination, and evaluation activities directly applicable to state and community impaired driving activities.

The alcohol budget includes funds for peer-to-peer spokespersons to spread the program, program development and dissemination on effective strategies for reaching high-risk and culturally diverse populations, demonstrations and evaluations of state graduated licensing programs for youth, demonstrations of effective sobriety checkpoint programs, training and technical assistance for judges and prosecutors, public information through the Ad Council and TEAM, worksite program development and implementation through NETS, and support for legislative priorities including administrative license revocation, .08 BAC, and zero tolerance for youth.

Mr. CARR. What are highest priority activities that you plan to conduct in the alcohol program in fiscal year 1995?

[The information follows:]

The highest priority alcohol program activities are those in support of the Secretary's combined alcohol/safety belt program. These will enable states to implement effective, well-publicized enforcement programs and to conduct education and prevention activities that will reduce alcohol-impaired driving, crashes, injuries, fatalities, and related health care costs.

Mr. CARR. What would be the impact of holding funding for the alcohol program to the 1994 level and what activities would not be conducted in fiscal year 1995?

[The information follows:]

The requested increase of $642 thousand in the fiscal year 1995 alcohol program budget will allow us to fully support the Secretary's alcohol initiative, to develop effective traffic safety programs with several high-risk and culturally diverse populations, and to conduct prevention activities in cooperation with medical and public health organizations such as the American Medical Association, the American Public Health Association, and the Centers for Disease Control. If funding is held at the 1994 level, we must limit the program material support that we provide for the Secretary's alcohol initiative, reduce our programming for culturally diverse groups, and reduce our cooperative efforts with medical and public health organizations.

### ALCOHOL PROGRAM—RESEARCH FINDINGS

Mr. CARR. What are the latest research findings regarding effective strategies for reaching diverse cultural populations to encourage them not to drink and drive?

[The information follows:]

The latest research findings from studies conducted by the U.S. Department of Health and Human Services show that health information diffusion strategies aimed at ethnic and cultural groups are most likely to be effective if these groups are involved in the planning and implementation of programs targeted for their respective populations. Additionally, many of the problems confronting diverse populations are geographically centered. Traditional sources do not yield the necessary data and programs to reach specific populations and cultures.

### ALCOHOL PROGRAM—PUBLIC INFORMATION CAMPAIGNS

Mr. CARR. What specific antidrinking and driving public information campaigns targeted to various cultural groups will be conducted during fiscal year 1994 and how will you evaluate their success?

[The information follows:]

Programs have been targeted for African Americans, Asian Americans, Native Americans, and Hispanics. Evaluations will be conducted by the organizations that will implement public information and educational campaigns for these populations to determine the number of people initially exposed to the drinking and driving messages. More broadly, the initiative will be a success if NHTSA is able to obtain recommendations for culturally appropriate program development and marketing strategies, generate interest in impaired driving prevention initiatives, and obtain contacts and commitments for future involvement in traffic safety projects from organizations representing these target groups.

Mr. CARR. The justifications indicate that about 10 States will receive during 1995 funds for a peer-to-peer spokesperson to promote alcohol and belt programs to elected officials in urban areas. What do you know about the success of such efforts and why are you focusing on elected officials in urban areas?

[The information follows:]

The peer-to-peer spokesperson approach was the strategy implemented for the Operation Buckle Down law enforcement national effort. Funding was available for 47 states for police chiefs to conduct peer-to-peer contacts and recruit other departments to establish safety belt use policies and encourage departments to enforce existing child safety seat and belt laws. As a result of this strategy, safety belt use was increased from 49 percent to its current 66 percent. The North Carolina "Click It or Ticket" campaign has, as one of its cornerstones of successes, the involvement of elected officials as spokespersons for the effort. Involvement of government officials is necessary to get jurisdictions to adopt safety programs. We will be pilot testing this approach in fiscal year 1995.

We are currently speaking to the national organizations of county officials to determine if such an approach is feasible with their members.

Mr. CARR. How will you select the participating States and how much would be allocated to this effort in fiscal year 1995?

[The information follows:]

We are planning to discuss this approach with national organizations to expand basic strategies. The selection of participating states would be accomplished using a similar federal grant process implemented during the Operation Buckle Down program for its peer-to-peer spokespersons. Strategy evaluation factors will be written, and normal contracting procedures followed. We are requesting $480 thousand to support ten state grants.

## WASHINGTON REGIONAL ALCOHOL PROGRAM

Mr. CARR. What have been the results of the Washington Regional Alcohol Program?

[The information follows:]

In fiscal year 1992, Congress provided $225,000 for NHTSA to "develop comprehensive programs on community and regional levels to reduce the incidence of underage drinking and driving" and directed that the model program be established in the Washington, DC area. Congress earmarked an additional $150,000 in FY 1993 for this project.

NHTSA awarded a grant to the Washington Regional Alcohol Program (WRAP) to assess the regional problem, generate community-based support to address the problem, develop a strategic plan, begin implementation of the plan, evaluate effectiveness, and develop a model program suitable for replication in other jurisdictions. WRAP has successfully completed much of this effort. A comprehensive assessment is complete; WRAP convened focus or community groups from throughout the region to lend input and support for the project; WRAP completed a comprehensive strategic plan with 170 recommended action steps and initiated many of these action steps in the region; and evaluation is ongoing. WRAP will complete the project in FY 1994 with a final evaluation and program materials that can be used in other cities.

## ALCOHOL PROGRAM—COLLABORATIVE ACTIVITIES

Mr. CARR. What collaborative activities are planned with the Departments of Justice, Health and Human Services, and Education in reaching inner city youth with antidrinking and driving messages?

[The information follows:]

NHSTA has numerous activities initiated to reach inner-city youth and numerous interagency projects targeting youth. However, there are no ongoing or planned projects with other agencies targeting inner-city youth.

NHTSA, the National Safety Council and the Boys and Girls Clubs of America are conducting a national "RAP" contest targeting inner-city youth with traffic safety messages. NHTSA has awarded a grant to Black Entertainment Television (BET) to develop curricula and public service announcements targeting inner-city schools. NHTSA is also developing traffic safety characters and messages which will appeal to inner-city youth. Finally, the Washington Regional Alcohol Program (WRAP) is concluding a model program to initiative underage drinking and driving programs in large metropolitan areas.

NHTSA has a number of interagency agreements, working primarily with the Center for Substance Abuse Prevention (CSAP, DHHS) on youth prevention programs and the Office of Juvenile Justice and Delinquency Prevention (OJJDP, DOJ) on youth enforcement projects. These projects are broad in scope, not specifically targeting urban areas.

Mr. CARR. Will the other federal agencies contribute financially to these activities?

[The information follows:]

The Office of Juvenile Justice and Delinquency Prevention (OJJDP, DOJ) and the Center for Substance Abuse Prevention (CSAP, DHHS) have contributed approximately $640,000 for current youth drinking driving projects since FY 1990. All of these projects are national in scope and not specifically targeted to inner-city youth.

## ALCOHOL PROGRAM: SOBRIETY CHECKPOINT EFFECTIVENESS

Mr. CARR. The justifications indicate that NHTSA will complete a statewide demonstration of the effectiveness of sobriety checkpoints. Last year, you told us that sobriety checkpoints had already been demonstrated to be an effective countermeasure. Where is the demonstration being conducted and what new information do you hope to get out of this demonstration activity?

[The information follows:]

The demonstration project is being conducted in Tennessee. While sobriety checkpoints are a proven effective countermeasure, they have never been conducted frequently throughout an entire state. Many states have been reluctant to adopt them because of their perceived expense and heavy demands on police officer time.

The demonstration in Tennessee will show that checkpoints can be conducted efficiently (with as few as 5–6 officers) and effectively, and that they are cost beneficial (since they will include safety belt use enforcement and result in arrests for other crimes). Tennessee currently conducts 10–12 checkpoints per year, usually during holiday periods. During the demonstration, Tennessee will conduct 600–700 highly publicized checkpoints per year on a weekly basis throughout the state.

The demonstration will document the decrease in drinking and driving, increase in safety belt use, and increase in arrests for other crimes resulting from this extensive program. It will provide other states with the process, the resources necessary, and the results they can expect if they conduct a similar program.

## ALCOHOL PROGRAM—BENEFIT FROM LOWERING BAC LEVELS

Mr. CARR. NHTSA has advocated the lowering of blood alcohol concentration levels from 0.10 percent to 0.08 percent. However, some observers believe that States, such as California, Maine and Oregon, have seen little benefit from lowering their BAC levels. Is this accurate? What evaluations has NHTSA conducted on the effectiveness of a lower adult BAC level in reducing alcohol related traffic fatalities?

[The information follows:]

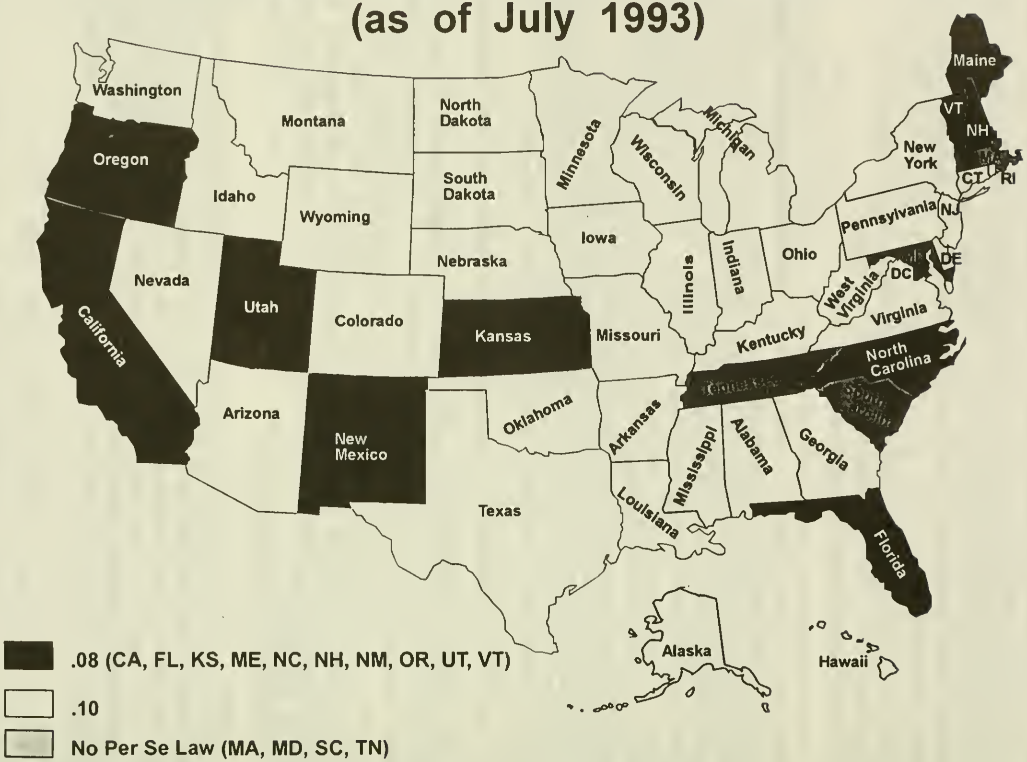
California, Maine, and Oregon all have experienced decreases in alcohol-related fatalities since they lowered the BAC limit to .08. NHTSA conducted a comprehensive study of the effect of .08 in California and found that there was a significant 12% decrease in alcohol-related fatalities in the year after the BAC limit was lowered to .08 and an administrative license revocation law took effect. NHTSA is in the process of analyzing the effects of .08 on alcohol-related fatalities in California, Maine, Utah, Oregon, and Vermont. A preliminary report on these analyses will be available later this spring.

## BAC PER SE LAWS MAP

Mr. CARR. Please provide a U.S. map showing states with BAC per se laws, including a breakdown between 0.10 and 0.08 BAC states.

[The information follows:]

# States with BAC Per Se Laws (as of July 1993)



Mr. CARR. What states have taken recent actions to lower their BAC limit to 0.08?

[The information follows:]

Five states lowered their illegal BAC level from 0.10 to 0.08 during the 1993 legislative sessions:

Florida (effective January 1, 1994).
Kansas (effective July 1, 1993).
New Hampshire (effective January 1, 1994.
New Mexico (effective January 1, 1994).
North Carolina (effective October 1, 1993).

During the 1994 legislation sessions, at least 20 states have introduced legislation to lower the limit to .08.

## ALCOHOL-RELATED FATALITY RATES PER VEHICLE MILES TRAVELED

Mr. CARR. Please update the chart showing alcohol-related fatality rates per 100 million vehicle miles traveled, as shown on page 363 of last year's hearing record.

[The information follows:]

*Alcohol-related fatality rates per 100 million vehicle miles of travel*

| Year: | *Rate per VMT* |
|---|---|
| 1986 | 1.3 |
| 1987 | 1.2 |
| 1988 | 1.2 |
| 1989 | 1.1 |
| 1990 | 1.0 |
| 1991 | 1.0 |
| 1992 | 0.8 |
| 1993[1] | 0.8 |

[1] Estimate.

## ALCOHOL-IMPAIRED DRIVERS RESEARCH

Mr. CARR. The justifications indicate that data will be collected on alcohol-impaired drivers involved in both fatal and nonfatal crashes to improve the knowledge base in this area. What kind of data will be collected and how will it differ from information available through FARS and NASS?

[The information follows:]

NHTSA is helping to fund the 1993 Mortality Followback Survey conducted by the National Center for Health Statistics (NCHS) in the Centers for Disease Control. In that survey, NHTSA will obtain detailed information from next of kin, medical examiners' reports, hospital records and other sources on 1,700 fatally injured drivers (plus 300 fatal pedestrians) on drinking and driving behaviors, risk taking, drug use, activities prior to the crash, deviant behaviors, and medical cost information in addition to other socio-economic data. The results will be compared to similar information NHTSA has obtained in general driver and population-at-risk surveys. This will allow NHTSA to define more precisely the drivers who are at high risk of fatal crash involvement. This in turn will allow NHTSA to develop more effective countermeasures for these drivers.

FARS and NASS contain only demographic and traffic record information on crash-involved drivers. They do not contain the behavioral data available through NCHS.

## FUNDING FOR ALCOHOL-IMPAIRED DRIVER ACTIVITY

Mr. CARR. How much will be allocated to this activity in fiscal year 1995?

[The information follows:]

We plan to allocate $300K in fiscal year 1995.

### NATIONAL TRAFFIC LAW CENTER FUNDING

Mr. CARR. What is allocated for the National Traffic Law Center in fiscal year 1994 and what is budgeted for fiscal year 1995?

[The information follows:]

The Center is incrementally funded for five years at $300,000 per year. In fiscal year 1994, $300,000 is allocated. The allocation for fiscal year 1995 is $300,000.

### TEAM—FUNDING PROFILE

Mr. CARR. Please provide a funding profile for your TEAM activities for fiscal years 1990 through 1995.

[The information follows:]

TEAM expenditures form fiscal year 1990 through fiscal year 1995 (anticipated) are as follows:

[In thousands of dollars]

| Fiscal year | Public information | Facility alcohol mgmt. | Community programs | Total |
|---|---|---|---|---|
| 1990 | 448 | 230 | 287 | 965 |
| 1991 | 500 | 120 | 200 | 820 |
| 1992 | 670 | 50 | .................. | 720 |
| 1993 | 500 | .................. | .................. | 500 |
| 1994 | 450 | .................. | .................. | 450 |
| 1995 | 440 | .................. | .................. | 440 |

### FATALITIES: ALCOHOL-IMPAIRED PEDESTRIANS

Mr. CARR. What proportion of the approximately 18,000 annual alcohol-related fatalities are actually alcohol-impaired pedestrians?

[The information follows:]

In 1992, there were a total of 17,669 alcohol-related fatalities. The number of alcohol-related fatalities that were alcohol-impaired pedestrians (BAC of .01+) was 2,121.

### ALCOHOL RELATED FATALITIES BY PERSON

Mr. CARR. Please provide a table that includes historical data on the number of alcohol-related fatalities, broken down by driver versus pedestrian fatalities.

[The information follows:]

## ALCOHOL RELATED FATALITIES BY PERSON TYPE

| PERSON TYPE | 1982 | 1990 | 1991 | 1992 |
|---|---|---|---|---|
| DRIVER | | | | |
| Total Fatalities | 24,690 | 25,750 | 23,930 | 22,583 |
| Alcohol-Related | 14,751 | 13,258 | 11,889 | 10,511 |
| % Alcohol-Related | 59.7 | 51.5 | 49.7 | 46.5 |
| OTHER OCCUPANTS | | | | |
| Total Fatalities | 10,956 | 11,384 | 10,810 | 10,286 |
| Alcohol-Related | 5,891 | 5,184 | 4,700 | 4,157 |
| % Alcohol-Related | 53.8 | 45.5 | 43.5 | 40.4 |
| PEDESTRIANS | | | | |
| Total Fatalities | 7,331 | 6,482 | 5,801 | 5,546 |
| Alcohol-Related | 4,116 | 3,258 | 2,933 | 2,743 |
| % Alcohol-Related | 56.1 | 50.3 | 50.6 | 49.5 |
| OTHER NONOCCUPANTS | | | | |
| Total Fatalities | 968 | 983 | 967 | 820 |
| Alcohol-Related | 406 | 384 | 366 | 287 |
| % Alcohol-Related | 41.9 | 39.1 | 37.8 | 35.0 |
| TOTAL | | | | |
| Total Fatalities | 43,945 | 44,599 | 41,508 | 39,235 |
| Alcohol-Related | 25,164 | 22,084 | 19,888 | 17,698 |
| % Alcohol-Related | 57.3 | 49.5 | 47.9 | 45.1 |

## ALCOHOL-RELATED PEDESTRIAN FATALITIES

Mr. CARR. What special activities are planned during fiscal year 1995 to address alcohol-related pedestrian fatalities?

[The information follows:]

The agency is conducting the final year of a research project that will identify strategies and countermeasures to address crash involved impaired pedestrians. This research program being conducted in Baltimore, Maryland, will be completed at the end of FY 1994. One of the products of this project will be a manual to assist states and communities in designing and implementing impaired pedestrian countermeasures programs.

The agency plans a new initiative involving three demonstration projects designed to reduce the incidence of impaired pedestrian crash casualties for groups showing a high incidence of impairment in crashes. These projects will utilize the strategies and countermeasures identified in the research program in Baltimore.

In addition, the agency will distribute the manual to state and local highway safety officials, and the law enforcement community.

## ALCOHOL IMPAIRED DRIVING ACTIVITIES—FUNDING

Mr. CARR. Including all sources (Section 402, Section 410, highway safety, research, et cetera), how much funding is requested for alcohol-impaired driving activities in fiscal year 1995, and how does that compare to fiscal years 1994 and 1993?

[The information follows:]

We are requesting $74.3M in fiscal year 95 for impaired driving programs. A breakdown of funding source and a comparison to previous fiscal years follows.

| Section | Fiscal year— | | |
|---|---|---|---|
| | 1993 | Estimated 1994 | Requested 1995 |
| 402 | 31.1 | 39.0 | 39.0 |
| 403 | 9.3 | 11.2 | 10.3 |
| 408 | 11.0 | 10.5 | 0 |
| 410 | 23.0 | 25.0 | 25.0 |
| Total | 74.4 | 85.7 | 74.3 |

Notes:

Section 402 includes basic grant funding to the states for traffic safety programs. This table gives the portion spent on alcohol programs. For FY 94, Congress specified an $8M setaside for youth alcohol programs.

Section 403 includes funding for research, demonstration and analysis programs. This table gives the portion spent on alcohol programs, drug evaluation and classification, and related highway safety research.

Section 408 are special alcohol program incentive grants to the states. FY 94 is the final year of the Section 408 program.

Section 410 are new alcohol program incentive grants to states which qualify. Section 410 includes funding from FHWA's Federal Aid Highways account in FY 1992 and FY 1993.

## SECTION 410—TOTAL APPROPRIATION AND DISBURSEMENT

Mr. CARR. How much has been appropriated for the Section 410 program since its inception, and how much has actually been disbursed to states?

[The information follows:]

As of March 22, 1994, a total of $58.9 million has been appropriated for the Section 410 program, including $8.9 million under NHTSA's Operations and Research appropriation, before enactment of ISTEA, and $50 million since ISTEA ($25 million provided through FHWA's Federal Aid Traffic Safety Grants account). $33.9 million has been obligated; the remaining $25 million in appropriations will be obligated in fiscal year 1994.

## STATES THAT QUALIFIED FOR SECTION 410 PROGRAM

Mr. CARR. How many additional States have qualified for the Section 410 program since fiscal year 1993?

[The information follows:]

During fiscal year 1993, five additional states qualified for Section 410 grants (Alaska, Nebraska, North Carolina, North Dakota, Oregon); this increased the number of qualified grantees from 19 to 24. As of March 22, 1994, no additional states have qualified for Section 410, although one new state (Missouri) has submitted an application for review. NHTSA anticipates as many as six new states in fiscal year 1994.

### SECTION 410—EVALUATION OF THE IMPACT ON ALCOHOL-IMPAIRED DRIVING

Mr. CARR. Last year, NHTSA indicated that it would conduct a three-year evaluation of the impact of the Section 410 program on alcohol-impaired driving. What is the status of this evaluation, and can you share any preliminary results?

[The information follows:]

The procurement for evaluation of the section 410 program has been advertised in the Commerce Business Daily. NHTSA expects to receive responses to the Request for Proposal (RFP) by June 1, 1994. Contract award should be middle to late summer depending upon the number of responses to the RFP (over 200 firms have expressed an interest in receiving the RFP). NHTSA expects preliminary results to be available by the middle of 1995.

### SECTION 410—BASIC AND SUPPLEMENTAL AWARDS

Mr. CARR. Please provide for the record a listing of total Section 410 awards broken down by basic and supplemental awards for each state for fiscal year 1993, and estimated for fiscal years 1994 and 1995.

[The information follows:]

95B

SECTIC 0

|  | 1993 |  |  |  | Est. 1 |  |  |  | Est. 1995 |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE |  |  | MAX GRNT | ACTUAL |  |  | MAX GRNT | CONTING. |  |  | MAX GRNT | CONTING. |
|  | BASIC | SUPPLEMEN | TOTAL | 79.92% | BASIC | SUPPLM | TOTAL | 68% | BASIC | SUPPLM | TOTAL | 62% |
| AK | $206,516 | $34,419 | $240,935 | $192,555 | $206,516 | $34,419 | $240,935 | $162,631 | $206,516 | $68,838 | $275,354 | $169,343 |
| AZ | $568,600 | $189,534 | $758,134 | $605,901 | $568,600 | $189,534 | $758,134 | $511,740 | $568,600 | $189,534 | $758,134 | $466,252 |
| CA | $3,965,520 | $2,643,680 | $6,609,200 | $5,282,073 | $3,965,520 | $3,304,600 | $7,270,120 | $4,907,331 | $3,965,520 | $3,304,600 | $7,270,120 | $4,471,124 |
| CO | $591,911 | $197,304 | $789,215 | $630,741 | $591,911 | $197,304 | $789,215 | $532,720 | $591,911 | $295,956 | $887,867 | $546,038 |
| CT | $0 | $0 | $0 | $0 | $442,911 | $0 | $442,911 | $298,965 | $442,911 | $0 | $442,911 | $272,390 |
| DE | $206,516 | $68,838 | $275,354 | $220,063 | $206,516 | $68,838 | $275,354 | $185,864 | $206,516 | $68,838 | $275,354 | $169,343 |
| DC | $206,516 | $103,257 | $309,773 | $247,571 | $206,516 | $103,257 | $309,773 | $209,097 | $206,516 | $103,257 | $309,773 | $190,510 |
| FL | $0 | $0 | $0 | $0 | $1,818,222 | $909,111 | $2,727,333 | $1,840,950 | $1,818,222 | $909,111 | $1,818,222 | $1,118,207 |
| GA | $0 | $0 | $0 | $0 | $1,051,835 | $350,612 | $1,402,447 | $946,652 | $1,051,835 | $350,612 | $1,051,835 | $646,879 |
| HI | $206,516 | $68,838 | $275,354 | $220,063 | $206,516 | $68,838 | $275,354 | $185,864 | $206,516 | $68,838 | $275,354 | $169,343 |
| IL | $1,709,493 | $854,748 | $2,564,241 | $2,049,341 | $1,709,493 | $854,748 | $2,564,241 | $1,730,863 | $1,709,493 | $854,748 | $2,564,241 | $1,577,008 |
| IN | $895,358 | $298,452 | $1,193,810 | $954,093 | $895,963 | $298,452 | $1,194,415 | $806,230 | $895,358 | $298,452 | $1,193,810 | $734,193 |
| KS | $0 | $0 | $0 | $0 | $635,919 | $211,972 | $847,891 | $572,326 | $635,919 | $211,972 | $847,891 | $521,453 |
| ME | $0 | $0 | $0 | $0 | $206,516 | $103,257 | $309,773 | $209,097 | $206,516 | $103,257 | $309,773 | $190,510 |
| MN | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $851,521 | $141,920 | $993,441 | $610,966 |
| MO | $0 | $0 | $0 | $0 | $917,384 | $152,897 | $1,070,281 | $722,440 | $917,384 | $152,897 | $1,070,281 | $658,223 |
| MT | $277,247 | $0 | $277,247 | $221,576 | $277,247 | $0 | $277,247 | $187,142 | $277,247 | $92,416 | $369,663 | $227,343 |
| NE | $423,743 | $70,624 | $494,367 | $395,098 | $423,743 | $70,624 | $494,367 | $333,698 | $423,743 | $211,872 | $635,615 | $390,903 |
| NM | $193,114 | $434,507 | $627,621 | $627,621 | $320,376 | $213,584 | $533,960 | $360,423 | $320,376 | $213,584 | $533,960 | $328,385 |
| NV | $259,348 | $86,450 | $345,798 | $276,362 | $259,348 | $86,450 | $345,798 | $233,414 | $259,348 | $172,900 | $432,248 | $265,833 |
| NJ | $1,009,052 | $168,175 | $1,177,227 | $940,840 | $1,009,052 | $168,175 | $1,177,227 | $794,628 | $1,009,052 | $168,175 | $1,177,227 | $723,995 |
| NY | $2,428,730 | $0 | $2,428,730 | $1,941,041 | $2,428,730 | $0 | $2,428,730 | $1,639,393 | $2,428,730 | $0 | $2,428,730 | $1,493,669 |
| NC | $1,031,770 | $171,962 | $1,203,732 | $962,023 | $1,031,770 | $343,924 | $1,375,694 | $928,593 | $1,031,770 | $687,848 | $1,719,618 | $1,057,565 |
| ND | $296,705 | $98,902 | $395,607 | $316,169 | $296,705 | $98,902 | $395,607 | $267,035 | $296,705 | $98,902 | $395,607 | $243,298 |
| OH | $1,582,973 | $527,658 | $2,110,631 | $1,686,816 | $1,582,973 | $527,658 | $2,110,631 | $1,424,676 | $1,582,973 | $527,658 | $2,110,631 | $1,298,038 |
| OR | $580,995 | $484,165 | $1,065,160 | $851,276 | $580,995 | $484,165 | $1,065,160 | $718,983 | $580,995 | $484,165 | $1,065,160 | $655,073 |
| PA | $1,713,742 | $571,248 | $2,284,990 | $1,826,164 | $1,713,742 | $571,248 | $2,284,990 | $1,542,368 | $1,713,742 | $856,872 | $2,570,614 | $1,580,928 |
| TX | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $2,805,334 | $0 | $2,805,334 | $1,725,280 |
| UT | $315,662 | $210,440 | $526,102 | $420,461 | $315,662 | $210,440 | $526,102 | $355,119 | $315,662 | $210,440 | $526,102 | $323,553 |
| VA | $910,346 | $151,724 | $1,062,070 | $848,806 | $910,346 | $151,724 | $1,062,070 | $716,897 | $910,346 | $151,724 | $1,062,070 | $653,173 |
| WV | $302,037 | $50,339 | $352,376 | $281,619 | $302,037 | $50,339 | $352,376 | $237,854 | $302,037 | $50,339 | $352,376 | $216,711 |
| WI | $863,369 | $431,685 | $1,295,054 | $1,035,007 | $863,369 | $431,685 | $1,295,054 | $874,161 | $863,369 | $431,685 | $1,295,054 | $796,458 |
| Tech.Asst. |  |  |  |  |  |  |  | $500,000 |  |  |  | $500,000 |
| TOTAL |  |  | $28,662,728 | $23,033,279 |  |  | $36,203,190 | $24,937,153 |  |  | $39,824,370 | $24,991,988 |
| APPROP. |  |  |  | $23,033,311 | APPROP. |  |  | $25,000,000 | REQUEST |  |  | $25,000,000 |

95B

SECTIC 0

| STATE | 1993 | | | | Est. 1 | | | | Est. 1995 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | MAX GRNT | ACTUAL | | | MAX GRNT | CONTING. | | | MAX GRNT | CONTING. |
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| AZ | $568,600 | $189,534 | $758,134 | $605,901 | $568,600 | $189,534 | $758,134 | $511,740 | $568,600 | $189,534 | $758,134 | $466,252 |
| CA | $3,965,520 | $2,643,680 | $6,609,200 | $5,282,073 | $3,965,520 | $3,304,600 | $7,270,120 | $4,907,331 | $3,965,520 | $3,304,600 | $7,270,120 | $4,471,124 |
| CO | $591,911 | $197,304 | $789,215 | $630,741 | $591,911 | $197,304 | $789,215 | $532,720 | $591,911 | $295,956 | $887,867 | $546,038 |
| CT | $0 | $0 | $0 | $0 | $442,911 | $0 | $442,911 | $298,965 | $442,911 | $0 | $442,911 | $272,390 |
| DE | $206,516 | $68,838 | $275,354 | $220,063 | $206,516 | $68,838 | $275,354 | $185,864 | $206,516 | $68,838 | $275,354 | $169,343 |
| DC | $206,516 | $103,257 | $309,773 | $247,571 | $206,516 | $103,257 | $309,773 | $209,097 | $206,516 | $103,257 | $309,773 | $190,510 |
| FL | $0 | $0 | $0 | $0 | $1,818,222 | $909,111 | $2,727,333 | $1,840,950 | $1,818,222 | $909,111 | $1,818,222 | $1,118,207 |
| GA | $0 | $0 | $0 | $0 | $1,051,835 | $350,612 | $1,402,447 | $946,652 | $1,051,835 | $350,612 | $1,051,835 | $646,879 |
| HI | $206,516 | $68,838 | $275,354 | $220,063 | $206,516 | $68,838 | $275,354 | $185,864 | $206,516 | $68,838 | $275,354 | $169,343 |
| IL | $1,709,493 | $854,748 | $2,564,241 | $2,049,341 | $1,709,493 | $854,748 | $2,564,241 | $1,730,863 | $1,709,493 | $854,748 | $2,564,241 | $1,577,008 |
| IN | $895,358 | $298,452 | $1,193,810 | $954,093 | $895,963 | $298,452 | $1,194,415 | $806,230 | $895,358 | $298,452 | $1,193,810 | $734,193 |
| KS | $0 | $0 | $0 | $0 | $635,919 | $211,972 | $847,891 | $572,326 | $635,919 | $211,972 | $847,891 | $521,453 |
| ME | $0 | $0 | $0 | $0 | $206,516 | $103,257 | $309,773 | $209,097 | $206,516 | $103,257 | $309,773 | $190,510 |
| MN | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $851,521 | $141,920 | $993,441 | $610,966 |
| MO | $0 | $0 | $0 | $0 | $917,384 | $152,897 | $1,070,281 | $722,440 | $917,384 | $152,897 | $1,070,281 | $658,223 |
| MT | $277,247 | $0 | $277,247 | $221,576 | $277,247 | $0 | $277,247 | $187,142 | $277,247 | $92,416 | $369,663 | $227,343 |
| NE | $423,743 | $70,624 | $494,367 | $395,098 | $423,743 | $70,624 | $494,367 | $333,698 | $423,743 | $211,872 | $635,615 | $390,903 |
| NM | $193,114 | $434,507 | $627,621 | $627,621 | $320,376 | $213,584 | $533,960 | $360,423 | $320,376 | $213,584 | $533,960 | $328,385 |
| NV | $259,348 | $86,450 | $345,798 | $276,362 | $259,348 | $86,450 | $345,798 | $233,414 | $259,348 | $172,900 | $432,248 | $265,833 |
| NJ | $1,009,052 | $168,175 | $1,177,227 | $940,840 | $1,009,052 | $168,175 | $1,177,227 | $794,628 | $1,009,052 | $168,175 | $1,177,227 | $723,995 |
| NY | $2,428,730 | $0 | $2,428,730 | $1,941,041 | $2,428,730 | $0 | $2,428,730 | $1,639,393 | $2,428,730 | $0 | $2,428,730 | $1,493,669 |
| NC | $1,031,770 | $171,962 | $1,203,732 | $962,023 | $1,031,770 | $343,924 | $1,375,694 | $928,593 | $1,031,770 | $687,848 | $1,719,618 | $1,057,565 |
| ND | $296,705 | $98,902 | $395,607 | $316,169 | $296,705 | $98,902 | $395,607 | $267,035 | $296,705 | $98,902 | $395,607 | $243,298 |
| OH | $1,582,973 | $527,658 | $2,110,631 | $1,686,816 | $1,582,973 | $527,658 | $2,110,631 | $1,424,676 | $1,582,973 | $527,658 | $2,110,631 | $1,298,038 |
| OR | $580,995 | $484,165 | $1,065,160 | $851,276 | $580,995 | $484,165 | $1,065,160 | $718,983 | $580,995 | $484,165 | $1,065,160 | $655,073 |
| PA | $1,713,742 | $571,248 | $2,284,990 | $1,826,164 | $1,713,742 | $571,248 | $2,284,990 | $1,542,368 | $1,713,742 | $856,872 | $2,570,614 | $1,580,928 |
| TX | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $2,805,334 | $0 | $2,805,334 | $1,725,280 |
| UT | $315,662 | $210,440 | $526,102 | $420,461 | $315,662 | $210,440 | $526,102 | $355,119 | $315,662 | $210,440 | $526,102 | $323,553 |
| VA | $910,346 | $151,724 | $1,062,070 | $848,806 | $910,346 | $151,724 | $1,062,070 | $716,897 | $910,346 | $151,724 | $1,062,070 | $653,173 |
| WV | $302,037 | $50,339 | $352,376 | $281,619 | $302,037 | $50,339 | $352,376 | $237,854 | $302,037 | $50,339 | $352,376 | $216,711 |
| WI | $863,369 | $431,685 | $1,295,054 | $1,035,007 | $863,369 | $431,685 | $1,295,054 | $874,161 | $863,369 | $431,685 | $1,295,054 | $796,458 |
| Tech.Asst. | | | | | | | | $500,000 | | | | $500,000 |
| TOTAL | | | $28,662,728 | $23,033,279 | | | $36,203,190 | $24,937,153 | | | $39,824,370 | $24,991,988 |
| APPROP. | | | | $23,033,311 | APPROP. | | | $25,000,000 | REQUEST | | | $25,000,000 |

SECTIC 0

| STATE | 1993 | | | | Est. 1 | | | | Est. 1995 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | MAX GRNT | ACTUAL | | | MAX GRNT | CONTING. | | | MAX GRNT | CONTING. |
| | BASIC | SUPPLEMEN | TOTAL | 79.92% | BASIC | SUPPLM | TOTAL | 68% | BASIC | SUPPLM | TOTAL | 62% |
| AK | $206,516 | $34,419 | $240,935 | $192,555 | $206,516 | $34,419 | $240,935 | $162,631 | $206,516 | $68,838 | $275,354 | $169,343 |
| AZ | $568,600 | $189,534 | $758,134 | $605,901 | $568,600 | $189,534 | $758,134 | $511,740 | $568,600 | $189,534 | $758,134 | $466,252 |
| CA | $3,965,520 | $2,643,680 | $6,609,200 | $5,282,073 | $3,965,520 | $3,304,600 | $7,270,120 | $4,907,331 | $3,965,520 | $3,304,600 | $7,270,120 | $4,471,124 |
| CO | $591,911 | $197,304 | $789,215 | $630,741 | $591,911 | $197,304 | $789,215 | $532,720 | $591,911 | $295,956 | $887,867 | $546,038 |
| CT | $0 | $0 | $0 | $0 | $442,911 | $0 | $442,911 | $298,965 | $442,911 | $0 | $442,911 | $272,390 |
| DE | $206,516 | $68,838 | $275,354 | $220,063 | $206,516 | $68,838 | $275,354 | $185,864 | $206,516 | $68,838 | $275,354 | $169,343 |
| DC | $206,516 | $103,257 | $309,773 | $247,571 | $206,516 | $103,257 | $309,773 | $209,097 | $206,516 | $103,257 | $309,773 | $190,510 |
| FL | $0 | $0 | $0 | $0 | $1,818,222 | $909,111 | $2,727,333 | $1,840,950 | $1,818,222 | $909,111 | $1,818,222 | $1,118,207 |
| GA | $0 | $0 | $0 | $0 | $1,051,835 | $350,612 | $1,402,447 | $946,652 | $1,051,835 | $350,612 | $1,051,835 | $646,879 |
| HI | $206,516 | $68,838 | $275,354 | $220,063 | $206,516 | $68,838 | $275,354 | $185,864 | $206,516 | $68,838 | $275,354 | $169,343 |
| IL | $1,709,493 | $854,748 | $2,564,241 | $2,049,341 | $1,709,493 | $854,748 | $2,564,241 | $1,730,863 | $1,709,493 | $854,748 | $2,564,241 | $1,577,008 |
| IN | $895,358 | $298,452 | $1,193,810 | $954,093 | $895,963 | $298,452 | $1,194,415 | $806,230 | $895,358 | $298,452 | $1,193,810 | $734,193 |
| KS | $0 | $0 | $0 | $0 | $635,919 | $211,972 | $847,891 | $572,326 | $635,919 | $211,972 | $847,891 | $521,453 |
| ME | $0 | $0 | $0 | $0 | $206,516 | $103,257 | $309,773 | $209,097 | $206,516 | $103,257 | $309,773 | $190,510 |
| MN | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $851,521 | $141,920 | $993,441 | $610,966 |
| MO | $0 | $0 | $0 | $0 | $917,384 | $152,897 | $1,070,281 | $722,440 | $917,384 | $152,897 | $1,070,281 | $658,223 |
| MT | $277,247 | $0 | $277,247 | $221,576 | $277,247 | $0 | $277,247 | $187,142 | $277,247 | $92,416 | $369,663 | $227,343 |
| NE | $423,743 | $70,624 | $494,367 | $395,098 | $423,743 | $70,624 | $494,367 | $333,698 | $423,743 | $211,872 | $635,615 | $390,903 |
| NM | $193,114 | $434,507 | $627,621 | $627,621 | $320,376 | $213,584 | $533,960 | $360,423 | $320,376 | $213,584 | $533,960 | $328,385 |
| NV | $259,348 | $86,450 | $345,798 | $276,362 | $259,348 | $86,450 | $345,798 | $233,414 | $259,348 | $172,900 | $432,248 | $265,833 |
| NJ | $1,009,052 | $168,175 | $1,177,227 | $940,840 | $1,009,052 | $168,175 | $1,177,227 | $794,628 | $1,009,052 | $168,175 | $1,177,227 | $723,995 |
| NY | $2,428,730 | $0 | $2,428,730 | $1,941,041 | $2,428,730 | $0 | $2,428,730 | $1,639,393 | $2,428,730 | $0 | $2,428,730 | $1,493,669 |
| NC | $1,031,770 | $171,962 | $1,203,732 | $962,023 | $1,031,770 | $343,924 | $1,375,694 | $928,593 | $1,031,770 | $687,848 | $1,719,618 | $1,057,565 |
| ND | $296,705 | $98,902 | $395,607 | $316,169 | $296,705 | $98,902 | $395,607 | $267,035 | $296,705 | $98,902 | $395,607 | $243,298 |
| OH | $1,582,973 | $527,658 | $2,110,631 | $1,686,816 | $1,582,973 | $527,658 | $2,110,631 | $1,424,676 | $1,582,973 | $527,658 | $2,110,631 | $1,298,038 |
| OR | $580,995 | $484,165 | $1,065,160 | $851,276 | $580,995 | $484,165 | $1,065,160 | $718,983 | $580,995 | $484,165 | $1,065,160 | $655,073 |
| PA | $1,713,742 | $571,248 | $2,284,990 | $1,826,164 | $1,713,742 | $571,248 | $2,284,990 | $1,542,368 | $1,713,742 | $856,872 | $2,570,614 | $1,580,928 |
| TX | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $2,805,334 | $0 | $2,805,334 | $1,725,280 |
| UT | $315,662 | $210,440 | $526,102 | $420,461 | $315,662 | $210,440 | $526,102 | $355,119 | $315,662 | $210,440 | $526,102 | $323,553 |
| VA | $910,346 | $151,724 | $1,062,070 | $848,806 | $910,346 | $151,724 | $1,062,070 | $716,897 | $910,346 | $151,724 | $1,062,070 | $653,173 |
| WV | $302,037 | $50,339 | $352,376 | $281,619 | $302,037 | $50,339 | $352,376 | $237,854 | $302,037 | $50,339 | $352,376 | $216,711 |
| WI | $863,369 | $431,685 | $1,295,054 | $1,035,007 | $863,369 | $431,685 | $1,295,054 | $874,161 | $863,369 | $431,685 | $1,295,054 | $796,458 |
| Tech.Asst. | | | | | | | | $500,000 | | | | $500,000 |
| TOTAL | | | $28,662,728 | $23,033,279 | | | $36,203,190 | $24,937,153 | | | $39,824,370 | $24,991,988 |
| APPROP. | | | | $23,033,311 | APPROP. | | | $25,000,000 | REQUEST | | | $25,000,000 |

95B

SECTIC 0

|  | 1993 |  |  |  | Est. 19 |  |  |  | Est. 1995 - |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | BASIC | SUPPLEMEN | MAX GRNT TOTAL | ACTUAL 79.92% | BASIC | SUPPLM | MAX GRNT TOTAL | CONTING. 68% | BASIC | SUPPLM | MAX GRNT TOTAL | CONTING. 62% |
| AK | $206,516 | $34,419 | $240,935 | $192,555 | $206,516 | $34,419 | $240,935 | $162,631 | $206,516 | $68,838 | $275,354 | $169,343 |
| AZ | $568,600 | $189,534 | $758,134 | $605,901 | $568,600 | $189,534 | $758,134 | $511,740 | $568,600 | $189,534 | $758,134 | $466,252 |
| CA | $3,965,520 | $2,643,680 | $6,609,200 | $5,282,073 | $3,965,520 | $3,304,600 | $7,270,120 | $4,907,331 | $3,965,520 | $3,304,600 | $7,270,120 | $4,471,124 |
| CO | $591,911 | $197,304 | $789,215 | $630,741 | $591,911 | $197,304 | $789,215 | $532,720 | $591,911 | $295,956 | $887,867 | $546,038 |
| CT | $0 | $0 | $0 | $0 | $442,911 | $0 | $442,911 | $298,965 | $442,911 | $0 | $442,911 | $272,390 |
| DE | $206,516 | $68,838 | $275,354 | $220,063 | $206,516 | $68,838 | $275,354 | $185,864 | $206,516 | $68,838 | $275,354 | $169,343 |
| DC | $206,516 | $103,257 | $309,773 | $247,571 | $206,516 | $103,257 | $309,773 | $209,097 | $206,516 | $103,257 | $309,773 | $190,510 |
| FL | $0 | $0 | $0 | $0 | $1,818,222 | $909,111 | $2,727,333 | $1,840,950 | $1,818,222 | $909,111 | $1,818,222 | $1,118,207 |
| GA | $0 | $0 | $0 | $0 | $1,051,835 | $350,612 | $1,402,447 | $946,652 | $1,051,835 | $350,612 | $1,051,835 | $646,879 |
| HI | $206,516 | $68,838 | $275,354 | $220,063 | $206,516 | $68,838 | $275,354 | $185,864 | $206,516 | $68,838 | $275,354 | $169,343 |
| IL | $1,709,493 | $854,748 | $2,564,241 | $2,049,341 | $1,709,493 | $854,748 | $2,564,241 | $1,730,863 | $1,709,493 | $854,748 | $2,564,241 | $1,577,008 |
| IN | $895,358 | $298,452 | $1,193,810 | $954,093 | $895,963 | $298,452 | $1,194,415 | $806,230 | $895,358 | $298,452 | $1,193,810 | $734,193 |
| KS | $0 | $0 | $0 | $0 | $635,919 | $211,972 | $847,891 | $572,326 | $635,919 | $211,972 | $847,891 | $521,453 |
| ME | $0 | $0 | $0 | $0 | $206,516 | $103,257 | $309,773 | $209,097 | $206,516 | $103,257 | $309,773 | $190,510 |
| MN | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $851,521 | $141,920 | $993,441 | $610,966 |
| MO | $0 | $0 | $0 | $0 | $917,384 | $152,897 | $1,070,281 | $722,440 | $917,384 | $152,897 | $1,070,281 | $658,223 |
| MT | $277,247 | $0 | $277,247 | $221,576 | $277,247 | $0 | $277,247 | $187,142 | $277,247 | $92,416 | $369,663 | $227,343 |
| NE | $423,743 | $70,624 | $494,367 | $395,098 | $423,743 | $70,624 | $494,367 | $333,698 | $423,743 | $211,872 | $635,615 | $390,903 |
| NM | $193,114 | $434,507 | $627,621 | $627,621 | $320,376 | $213,584 | $533,960 | $360,423 | $320,376 | $213,584 | $533,960 | $328,385 |
| NV | $259,348 | $86,450 | $345,798 | $276,362 | $259,348 | $86,450 | $345,798 | $233,414 | $259,348 | $172,900 | $432,248 | $265,833 |
| NJ | $1,009,052 | $168,175 | $1,177,227 | $940,840 | $1,009,052 | $168,175 | $1,177,227 | $794,628 | $1,009,052 | $168,175 | $1,177,227 | $723,995 |
| NY | $2,428,730 | $0 | $2,428,730 | $1,941,041 | $2,428,730 | $0 | $2,428,730 | $1,639,393 | $2,428,730 | $0 | $2,428,730 | $1,493,669 |
| NC | $1,031,770 | $171,962 | $1,203,732 | $962,023 | $1,031,770 | $343,924 | $1,375,694 | $928,593 | $1,031,770 | $687,848 | $1,719,618 | $1,057,565 |
| ND | $296,705 | $98,902 | $395,607 | $316,169 | $296,705 | $98,902 | $395,607 | $267,035 | $296,705 | $98,902 | $395,607 | $243,298 |
| OH | $1,582,973 | $527,658 | $2,110,631 | $1,686,816 | $1,582,973 | $527,658 | $2,110,631 | $1,424,676 | $1,582,973 | $527,658 | $2,110,631 | $1,298,038 |
| OR | $580,995 | $484,165 | $1,065,160 | $851,276 | $580,995 | $484,165 | $1,065,160 | $718,983 | $580,995 | $484,165 | $1,065,160 | $655,073 |
| PA | $1,713,742 | $571,248 | $2,284,990 | $1,826,164 | $1,713,742 | $571,248 | $2,284,990 | $1,542,368 | $1,713,742 | $856,872 | $2,570,614 | $1,580,928 |
| TX | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $2,805,334 | $0 | $2,805,334 | $1,725,280 |
| UT | $315,662 | $210,440 | $526,102 | $420,461 | $315,662 | $210,440 | $526,102 | $355,119 | $315,662 | $210,440 | $526,102 | $323,553 |
| VA | $910,346 | $151,724 | $1,062,070 | $848,806 | $910,346 | $151,724 | $1,062,070 | $716,897 | $910,346 | $151,724 | $1,062,070 | $653,173 |
| WV | $302,037 | $50,339 | $352,376 | $281,619 | $302,037 | $50,339 | $352,376 | $237,854 | $302,037 | $50,339 | $352,376 | $216,711 |
| WI | $863,369 | $431,685 | $1,295,054 | $1,035,007 | $863,369 | $431,685 | $1,295,054 | $874,161 | $863,369 | $431,685 | $1,295,054 | $796,458 |
| Tech.Asst. |  |  |  |  |  |  |  | $500,000 |  |  |  | $500,000 |
| TOTAL |  |  | $28,662,728 | $23,033,279 |  |  | $36,203,190 | $24,937,153 |  |  | $39,824,370 | $24,991,988 |
| APPROP. |  |  |  | $23,033,311 | APPROP. |  |  | $25,000,000 | REQUEST |  |  | $25,000,000 |

## SECTION 408 GRANT OBLIGATIONS BY STATE

Mr. CARR. Please update the state-by-state data on Section 408 grant obligations, as shown on pages 350 through 353 of last year's hearing record, by providing data for 1993 and deleting data for 1989.

[The information follows:]

## Basic, Supplemental and Total 408 Alcohol Safety Grant Obligations FY 1990 - 1993

| ST | GRANT | 1990 | 1991 | 1992 | 1993 | FY 90-93 TOTALS |
|---|---|---|---|---|---|---|
| **AZ** | Basic | 420,848 | 420,848 | 841,696 | 0 | 1,683,392.00 |
| | Suppl. | 280,565 | 280,565 | 280,565 | 280,565 | 1,122,260.00 |
| | Total | 701,413 | 701,413 | 1,122,261 | 280,565 | 2,805,652.00 |
| **DE** | Basic | 157,200 | 157,200 | 0 | 0 | 314,400.00 |
| | Suppl. | 104,800 | 104,800 | 0 | 0 | 209,600.00 |
| | Total | 262,000 | 262,000 | 0 | 0 | 524,000.00 |
| **ME** | Basic | 157,200 | 0 | 0 | 0 | 157,200.00 |
| | Suppl. | 104,800 | 0 | 0 | 0 | 104,800.00 |
| | Total | 262,000 | 0 | 0 | 0 | 262,000.00 |
| **MT** | Basic | 0 | 0 | 0 | 0 | 0 |
| | Suppl. | 145,306 | 0 | 0 | 0 | 145,306.00 |
| | Total | 145,306 | 0 | 0 | 0 | 145,306.00 |
| **NV** | Basic | 164,093 | 0 | 0 | 0 | 164,093.00 |
| | Suppl. | 109,395 | 109,395 | 0 | 0 | 218,790.00 |
| | Total | 273,488 | 109,395 | 0 | 0 | 382,883.00 |
| **NH** | Basic | 0 | 0 | 0 | 0 | 0 |
| | Suppl. | 104,800 | 0 | 0 | 0 | 104,800.00 |
| | Total | 104,800 | 0 | 0 | 0 | 104,800.00 |
| **NJ** | Basic | 796,474 | 0 | 0 | 0 | 796,474.00 |
| | Suppl. | 530,983 | 530,983 | 1,061,966 | 0 | 2,123,932.00 |
| | Total | 1,327,457 | 530,983 | 1,061,966 | 0 | 2,920,406.00 |
| **ND** | Basic | 0 | 232,358 | 0 | 0 | 232,358.00 |
| | Suppl. | 154,906 | 154,906 | 0 | 0 | 309,812.00 |
| | Total | 154,906 | 387,264 | 0 | 0 | 542,170.00 |
| **RI** | Basic | 157,200 | 0 | 0 | 0 | 157,200.00 |
| | Suppl. | 104,800 | 0 | 0 | 0 | 104,800.00 |
| | Total | 262,000 | 0 | 0 | 0 | 262,000.00 |

## Anticipated Basic, Supplemental and Total 408 Alcohol Safety Grant Obligations
FY 1993 - FY 1994

| ST | GRANT | 1990 | 1991 | 1992 | 1993 | FY 90-93 |
|---|---|---|---|---|---|---|
| UT | Basic | 0 | 230,349 | 0 | 0 | 230,349.00 |
| | Suppl. | 0 | 153,566 | 0 | 0 | 153,566.00 |
| | Total | 0 | 383,915 | 0 | 0 | 383,915.00 |
| LA | Basic | 527,956 | 527,956 | 0 | 0 | 1,055,921.00 |
| | Suppl. | 351,971 | 351,971 | 0 | 0 | 703,942.00 |
| | Total | 879,927 | 879,927 | 0 | 0 | 1,759,854.00 |
| WA | Basic | 572,533 | 0 | 0 | 0 | 572,533.00 |
| | Suppl. | 381,688 | 381,688 | 763,376 | 0 | 1,526,752.00 |
| | Total | 954,221 | 381,688 | 763,376 | 0 | 2,099,285.00 |
| IL | Basic | 1,394,474 | 1,394,474 | 2,788,948 | 0 | 5,577,896.00 |
| | Suppl. | 929,649 | 929,649 | 929,649 | 929,649 | 3,718,596.00 |
| | Total | 2,324,123 | 2,324,123 | 3,718,597 | 929,649 | 9,296,492.00 |
| OR | Basic | 498,044 | 498,044 | 996,088 | 0 | 1,992,176.00 |
| | Suppl. | 332,029 | 332,029 | 332,029 | 332,029 | 1,328,116.00 |
| | Total | 830,073 | 830,073 | 1,328,117 | 332,029 | 3,320,292.00 |
| WV | Basic | 0 | 261,815 | 523,630 | 0 | 785,445.00 |
| | Suppl. | 0 | 174,543 | 174,543 | 174,543 | 523,629.00 |
| | Total | 0 | 436,358 | 698,173 | 174,543 | 1,309,074.00 |
| OK | Basic | 514,811 | 514,811 | 514,811 | 514,811 | 2,059,244.00 |
| | Suppl. | 343,207 | 343,207 | 343,207 | 343,207 | 1,372,828.00 |
| | Total | 858,018 | 858,018 | 858,018 | 858,018 | 3,432,872.00 |
| KS | Basic | 492,517 | 492,517 | 492,517 | 492,517 | 1,970,068.00 |
| | Suppl. | 328,345 | 0 | 328,345 | 328,345 | 985,035.00 |
| | Total | 820,862 | 492,517 | 820,862 | 820,862 | 2,955,103.00 |
| CO | Basic | 0 | 434,489 | 434,489 | 434,489 | 1,303,467.00 |
| | Suppl. | 0 | 243,411 | 289,659 | 289,659 | 822,729.00 |
| | Total | 0 | 677,900 | 724,148 | 724,148 | 2,126,196.00 |
| CT | Basic | 346,454 | 346,454 | 346,454 | 0 | 1,039,362.00 |
| | Suppl. | 0 | 115,485 | 115,485 | 0 | 230,970.00 |
| | Total | 346,454 | 461,939 | 461,939 | 0 | 1,270,332.00 |

## Basic, Supplemental and Total 408 Alcohol Safety Grant Obligations
## FY 1990 - 1993

| ST | GRANT | 1990 | 1991 | 1992 | 1993 | FY 90-93 |
|---|---|---|---|---|---|---|
| CA | Basic | 2,694,490 | 2,694,490 | 2,694,490 | 2,694,490 | 10,777,960.00 |
| | Suppl. | 1,796,327 | 1,796,327 | 1,796,327 | 1,601,318 | 6,990,299.00 |
| | Total | 4,490,817 | 4,490,817 | 4,490,817 | 4,295,808 | 17,768,259.00 |
| WI | Basic | 0 | 678,041 | 1,356,082 | 0 | 2,034,123.00 |
| | Suppl. | 0 | 452,028 | 452,028 | 452,028 | 1,356,084.00 |
| | Total | 0 | 1,130,069 | 1,808,110 | 452,028 | 3,390,207.00 |
| HI | Basic | 0 | 0 | 314,400 | 0 | 314,400.00 |
| | Suppl. | 0 | 0 | 209,600 | 0 | 209,600.00 |
| | Total | 0 | 0 | 524,000 | 0 | 524,000.00 |
| MO | Basic | 0 | 0 | 719,162 | 719,162 | 1,438,324.00 |
| | Suppl. | 0 | 0 | 479,441 | 479,441 | 958,882.00 |
| | Total | 0 | 0 | 1,198,603 | 1,198,603 | 2,397,206.00 |
| ID | Basic | 0 | 0 | 225,262 | 225,262 | 450,524.00 |
| | Suppl. | 0 | 0 | 150,175 | 150,175 | 300,350.00 |
| | Total | 0 | 0 | 375,437 | 375,437 | 750,874.00 |
| NE | Basic | 0 | 0 | 0 | 334,986 | 334,986.00 |
| | Suppl. | 0 | 0 | 0 | 223,324 | 223,324.00 |
| | Total | 0 | 0 | 0 | 558,310 | 558,310.00 |
| | YRLY TOTALS | 14,997,865 | 15,338,399 | 19,954,424 | 11,000,000 | 61,290,688.00 |

## SECTION 408—UNOBLIGATED CONTRACT AUTHORITY

Mr. CARR. Please also update the table on Section 408 unobligated contract authority, as shown on page 354 of last year's hearing record, by providing data for 1983 through 1994.

[The information follows:]

### SECTION 408—ALCOHOL SAFETY INCENTIVE GRANTS

[In thousands of dollars]

| Fiscal year | Unused contract authority beginning of year | New contract authority | Reduction in contract authority | Less: Obligations | Unused contract authority end of year |
|---|---|---|---|---|---|
| 1983 | | $25,000 | | | $25,000 |
| 1984 | $25,000 | 50,000 | | −$5,160 | 69,840 |
| 1985 | 69,840 | 50,000 | | −6,287 | 113,553 |
| 1986 | 113,553 | | [1] −$1,526 | −12,027 | 100,000 |
| 1987 | 100,000 | | [2] −5,000 | −915 | 94,085 |
| 1988 | 94,085 | | | −11,468 | 82,617 |
| 1989 | 82,617 | | | −4,388 | 78,229 |
| 1990 | 78,229 | | | −15,762 | 62,467 |
| 1991 | 62,467 | | | −15,338 | 47,129 |
| 1992 | 47,129 | | | −19,954 | |
| | | | | [3] +818 | 27,993 |
| 1993 | 27,993 | | | −11,000 | 16,993 |
| 1994 | 16,993 | | [2] −6,493 | −10,500 | |

[1] Authorization lapsing.

[2] Rescission.

[3] Reflects recoveries of prior year obligations.

Note.—Table shows funding balances starting with the inception of the program. Obligation data based on the agency's budget execution reports. Two offsetting financial transactions are not shown (a lapse of contract authority at the end of FY 1987 and the subsequent reauthorization of the same amount in FY 1988).

## DRUGGED DRIVING RESEARCH

Mr. CARR. Please summarize the nature and magnitude of the drugged driving problem.

[The information follows:]

Alcohol is the predominant drug problem. In crash studies, alcohol (at intoxication levels), is by far the most prevalent substance found. Other drugs have been found in a sizable percentage of fatally injured drivers. The most recent comprehensive fatal crash study found a drug incidence rate of 18%. The most frequently occurring drugs were marijuana (6.7%), cocaine (5.3%), tranquilizers (2.9%) and amphetamines (1.9%), and about two-thirds of the time these drugs were found combined with alcohol. However, analyses carried out as part of this study to determine the extent to which these drugs contributed to the crash suggest little relation between drug use and crash risk. Drugs appeared to offer the most hazard potential when combined with other drugs, although this situation occurred very infrequently (1.3%). Also, there appeared to be some potential for increased crash risk when certain drugs were combined with alcohol.

These findings are supported by the results from recent "driving simulator" and "controlled on-road" driving research that used dosed subject to determine the effects of selected drugs (e.g., marijuana, valium) on driving performance. With single drug consumption, most of the effects on driving performance were found to be relatively minor.

However, more information is needed regarding drug presence and causal influence in injury crashes, and the performance-impairing effects on various alcohol/drug and drug/drug combinations, before final conclusions about the drugged driving problem can be stated. Research regarding these issues is being pursued by NHTSA.

Mr. CARR. What research is NHTSA conducting to assess the frequency of the occurrence of drugs in crash-involved drivers and the extent to which drugs contribute to crash causation?

[The information follows:]

MHTSA has recently completed and published the results from a crash study designed to determine the incidence of selected drugs in a nationwide sample of fatally injured drivers selected from sites in seven states. Blood samples were collected and analyzed for alcohol and 43 other drugs of interest. An overall drug incidence rate of 18% was found. The most frequently occurring drugs were marijuana (6.7%), cocaine (5.3%), tranquilizers (2.9%), and amphetamines (1.9%). However, it should be noted that in approximately two-thirds of the drug cases, alcohol (usually at high doses) was also found. It should also be stressed that the mere presence of a drug in a crash-involved driver does not necessarily mean that the drug caused the crash. Analyses were carried out as part of this study to determine the extent to which drugs contribute to crash causation. The results from these analyses indicate that drugs are most likely to increase crash risk when combined with other drugs or alcohol. However, caution should be exercised in drawing definitive conclusions from these crash risk analyses because of the small sample sizes involved.

The results from this study only apply to fatally injured drivers. More information is needed regarding drug presence and causal influence in other types of crash-involved drivers. NHTSA is currently planning this type of study for injured drivers that are admitted to a hospital for treatment.

## DRUGGED OFFENDERS LICENSE REVOCATION LAW

Mr. CARR. What states have not yet complied with the requirements of the drugged offenders license revocation law?

[The information follows:]

Eight (8) states have not yet complied with the requirements of 23 U.S.C. § 159 (Drug Offender's Driver's License Suspension). These States are as follow: California, Delaware, Georgia, Indiana, Kansas, Kentucky, Michigan, and South Carolina.

Kentucky's governor recently signed a joint legislative resolution opposing Section 159. Therefore, the state is expected to come into compliance in the near future after the appropriate documentation is submitted for agency review.

Mr. CARR. Have any states had federal aid highway funds withheld for noncompliance?

[The information follows:]

On October 1, 1993, eleven (11) states were not in compliance with Section 159 requirements and had five (5) percent of specified Federal-aid highway funds withheld. these states were: Alabama, California, Delaware, Georgia, Indiana, Kansas, Kentucky, Michigan, New Jersey, New York, and South Carolina.

Subsequently, Alabama, New Jersey, and New York have come into compliance and their withheld funds have been released.

## DEC PROGRAM SUPPORT

Mr. CARR. Since recent studies have shown that drug recognition expert evaluations represent a small proportion of all impaired-driving arrests, should federal support of the Drug Evaluation and Classification Program be discontinued?

[The information follows:]

The DEC evaluations do represent a small proportion of overall impaired driving arrests; however, there is no other training program for law enforcement officers that deals as effectively with the drug impaired driver. The law enforcement community views the DEC program as a valuable asset in its war on drugs. The program techniques are considered to be an excellent tool for removing drug impaired drivers from our highways. Additional certified officers would expand the impact of the DEC program and result in more arrests.

By fiscal year 1995, substantial funding will no longer be required to assist states in implementing the DEC program. Most states with high drug-impaired driver populations will have established DEC programs. We will continue to provide regional technical support to those DEC states in their final year of reaching self-sufficiency, continue prosecutor and judge training in DEC sites, and complete the checkpoint demonstration on detecting drivers impaired by drugs or alcohol.

Research that validates and simplifies the DEC evaluation procedures will be completed in 1995. We will then develop and pilot-test a revised training program, making these materials available to existing DEC programs in the states. Additionally, the agency will pilot-test and evaluate a screening instrument for drug impaired drivers to identify the need for treatment beyond the sanctions for an impaired driving conviction.

### DEC PROGRAM—PARTICIPATING STATES

Mr. CARR. Which states are currently participating in the DEC program and will any new states be added during fiscal year 1995?

[The information follows:]

The program is active in 24 states and the District of Columbia, representing approximately 350 jurisdictions with 3,700 nationally certified DREs.

DEC States: Arizona, Arkansas, California, Colorado, District of Columbia, Florida, Georgia, Indiana, Iowa, Louisiana, Maine, Maryland, Minnesota, Missouri, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, Oklahoma, Rhode Island, Texas, Utah, Virginia.

Hawaii, Kansas and Kentucky are actively interested in implementing the DEC program.

Mr. CARR. Which states have programs that are now completely self sufficient?

[The information follows:]

The following states are completely self-sufficient and managed by their state and local law enforcement agencies:

Arizona, California, Colorado, District of Columbia, Indiana, Maine, Maryland, Minnesota, New York, Oklahoma, Texas, Utah, Virginia.

Mr. CARR. Of the remaining states, in what stages are their programs? Which states are in their final year of reaching self sufficiency?

[The information follows:]

The 12 remaining states are at varying stages of program maturity. All have established state-level coordination and maintain local agency management control of the DEC program. Most do not have enough trained DEC instructors to enable them to conduct the required training and field certifications.

Therefore, they will continue to need some training support until a self-sufficient cadre of instructors is in place.

Florida, Iowa, Missouri, Nevada, and Rhode Island should reach self-sufficiency within the next year.

### DEC PROGRAM—TRANSITION TO THE STATES

Mr. CARR. How much will be allocated in fiscal year 1995 to further transition the DEC program to the States?

[The information follows:]

Substantial funding will not be required to assist states in implementing the DEC program. By fiscal year 1995, most states with high drug-impaired driver populations will have established DEC programs in place. The focus then will be to continue with regional technical support only to DEC states in their final year of reaching self-sufficiency ($200 thousand). There will be a need for the agency to continue prosecutor and judge training in DEC sites ($100 thousand).

Ongoing research to validate and simplify the DEC evaluation is underway. If the course needs to be refined, the changes will be made to the curricula and training materials will be made available to the states.

### DEC PROGRAM—STATE ALLOCATIONS

Mr. CARR. Please provide a table that shows fiscal year 1993 and 1994 and planned fiscal year 1995 State allocations under the DEC program.

[The information follows:]

### DRUG EVALUATION AND CLASSIFICATION PROGRAM STATE ALLOCATIONS

[In thousands of dollars]

| Training cooperative agreements | 1993 | 1994 (estimate) | 1995 (estimate) | Total (estimate) |
|---|---|---|---|---|
| Arizona | 50 | 150 | 0 | 200 |
| California | 80 | 100 | 0 | 180 |
| Colorado | 27 | 30 | 0 | 57 |
| Florida | 0 | 50 | 0 | 50 |
| Indiana | 0 | 50 | 0 | 50 |
| Maine | 67 | 70 | 0 | 137 |
| Maryland | 40 | 50 | 0 | 90 |
| Minnesota | 67 | 70 | 0 | 137 |
| New York | 0 | 125 | 0 | 125 |
| Rhode Island | 64 | 20 | 0 | 84 |
| Texas | 100 | 150 | 0 | 250 |
| Utah | 0 | 30 | 0 | 30 |
| Total | 495 | 895 | 0 | 1,390 |

## DEC PROGRAM—FUNDING DISTRIBUTION

Mr. CARR. Please provide the distribution of DEC program funds between research and development; systems support; and training, public information and education for fiscal year 1994 and your estimate for fiscal year 1995.

[The information follows:]

| Drug Evaluation and classification | Fiscal year— | |
|---|---|---|
| | 1994 | 1995 |
| Research and Development | 1,250 | 225,000 |
| System Support | 555,000 | 741,000 |
| Training | 895,000 | 564,000 |
| Public Information and Education | 100,000 | 0 |
| Total | 2,800,000 | 1,530,000 |

## DEC PROGRAM—TRANSITION TO THE STATES

Mr. CARR. What are your long-term plans regarding transitioning the DEC program to the states and what is your timetable for doing so?

[The information follows:]

The agency's long term goal for the DEC program has been to institutionalize it fully within each of the participating states through the program's training elements. The plan provides a systematic method for developing the program within each state, utilizing the training and technical expertise of self-sufficient DEC states to assist others (States) that are new or have less than sufficient resources. This process continues moving the states through various stages of program development until they no longer need outside assistance. Each state progresses at different rates, but most states are self-sufficient within 2½ years.

A key element in the institutionalization of the program is the regionalized technical support and training coordination to assist the states with their own state DEC Program. The 3 DEC regional coordinators have been in place for about 6 months and have taken over all DEC implementation activities by providing the states in their area with implementation assistance and technical support. The goal of these activities is to support those DEC states in their final year of reaching self-sufficiency.

The agency continues to work with the International Association of Chiefs of Police (IACP) to increase their role in the DEC program. The IACP, through its member representative committees, currently establishes the program minimum standards, certifies all program participants, and develops and revises curricula. IACP will begin assisting the states by providing technical assistance for assessing program eligibility and monitoring of sites to ensure compliance with minimum standards. It is anticipated that IACP will continue its active role with the DEC program.

### DEC PROGRAM—NHTSA/NIDA EVALUATION

Mr. CARR. What are the results on the joint NHTSA/NIDA evaluation of the 12-step drug evaluation process used in the DEC program?

[The information follows:]

The first phase of the joint evaluation has been completed, and analysis of the data is underway. Preliminary results indicate that it will be possible to improve drug recognition experts' (DREs) diagnoses of drug impairment. Once all of the data have been collected and analyzed,we expect to identify elements of the 12-step process do *not* reliably contribute to the assessment of drug impairment; removal of those elements will streamline the DRE's work and permit more accurate drug classification. We also expect to identify scientifically-based methods of "weighting" the reliable cues, so that DREs can give due consideration to the most compelling evidence when they formulate their opinions. Finally, for each of the drugs studied thus far, a set of cues has been identified that permits discrimination between dosed and non-dosed subjects in the majority of cases. However, it is important to stress that the study has to date covered only a very limited set of drugs.

### DEC PROGRAM—PLANNED RESEARCH

Mr. CARR. What additional research pertaining to the DEC program is planned?

[The information follows:]

Two DEC research projects are planned. Contract award for both projects should be around May 1, 1994. One project, the DEC Program Site Experience, will determine the relative importance of the different types of information available to the Drug Recognition Expert (DRE) in deciding whether a suspect is under the influence of drugs. This project will also evaluate the strengths and weaknesses of the DEC program in different enforcement contexts (i.e., size, type and location of enforcement agency). In evaluating the strengths and weaknesses of the DEC program, the project will determine the necessary level of management and training support required to maintain a successful DEC program.

The second project, Development of DEC Interview Procedures, will develop a workable set of interview procedures that can be used to obtain evidence for convicting drug-impaired drivers. This project will also assess the effectiveness of the developed interview procedures in obtaining evidence under actual enforcement conditions.

### DEC PROGRAM—STATES RESPONSE TO MANAGEMENT TRANSFER

Mr. CARR. What has been the states' response to NHTSA's transfer of the management of the DEC program from headquarters to NHTSA's regional offices?

[The information follows:]

The regionalized approach to implementing the DEC program has been well received by the states. The agency's decentralization of the program is providing each state with a consistent level of support and a timely response to request for technical assistance. DEC regional coordinators will continue to work with each state to assist with the transfer of the DEC program.

### PEDESTRIAN-RELATED RESEARCH FUNDING

Mr. CARR. The fiscal year 1995 request includes $949,000 for pedestrian related research and demonstration programs. This amount is about 4 percent of the total contract budget request for traffic safety programs. Considering that pedestrian fatalities represent about 14 percent of all highway fatalities, is NHTSA giving appropriate attention to pedestrian research?

[The information follows:]

This budget request is a significant increase over previous budget requests for this program area. The request reflects an marked increase in activity that addresses pedestrian and bicycle safety issues. Pedestrian and bicycle safety were added to the list of national highway safety priority program areas in October 1991. Interest at the state and local level is only just now starting to grow.

The FY 1995 budget request does not reflect those activities that are being conducted by FHWA in our joint NHTSA/FHWA pedestrian action plan. We believe that our activities when combines with those of FHWA represent an adequate approach to this area for the coming fiscal year.

Mr. CARR. Including all sources [Section 402, highway safety, research, et cetera), how much funding is requested for pedestrian-related activities in fiscal year 1995, and how does that compare to fiscal years 1994 and 1993?

[The information follows:]

The following table reflects the budget requests pedestrian-related activities for 1993, 1994 and 1995:

[In thousands of dollars]

| Source | 1993 | 1994 | 1995 |
|---|---|---|---|
| 402 | 975 | N/A | N/A |
| Highway Safety | 335 | 328 | 469 |
| Research | 276 | 200 | 285 |

Section 402 funding is the largest component of pedestrian program funding. However, the amount of 402 funds which will be expended in this area in FY 1994 and FY 1995 is not available at this time.

Not including 402 funding, the above table shows that the remainder of requested funding for FY 1995 ($784K) reflects an increase of approximately 32 percent over the previous two years.

Thus, if the level of state 402 funds devoted to pedestrian-related activities remains relatively level at $975K from FY 1993 through FY 1995, the total FY 1995 expenditure ($1759K) will represent an increase of about 12 percent over the average total expenditures of the previous two years. If state spending in this area increases, as it is expected to do, this percentage increase will be larger.

## PEDESTRIAN RESEARCH PROGRAM ACCOMPLISHMENTS

Mr. CARR. What have been the accomplishments of NHTSA's pedestrian research program to date?

[The information follows:]

NHTSA's accomplishments in pedestrian safety are considerable. The research program has identified the urban, suburban, and rural problems in a detailed productive way, used that problem identification to target major pedestrian problems for research, and developed countermeasures that worked, i.e., reduced pedestrian crashes.

## NHTSA/FHWA—FOCUS ON PEDESTRIAN TRAFFIC SAFETY

Mr. CARR. How does your focus on pedestrian traffic safety differ from that of the FHWA?

[The information follows:]

Through their respective enabling legislations, NHTSA and FHWA share responsibility for pedestrian safety and have a common goal of reducing pedestrian deaths and injuries by preventing pedestrian crashes . . . (FHWA also goes beyond the concerns of safety to include the additional consideration of accommodation, i.e., ensuring that the physical facilities meet the full range of the pedestrian's needs.) The major difference is that NHTSA focuses on the vehicle and the behavior of the drivers and pedestrians, while FHWA concentrations on the physical environment which these road users share. Basically, NHTSA works to change crash-producing behavior (errors) education and enforcement, while FHWA pursues its objectives through engineering the environment. Obviously, because of the strong interconnection of the road user behaviors, the vehicle, and the environment, the two agencies do a considerable amount of joint research that allows each agency to pursue its unique approaches within a common framework.

## RESEARCH BASED PEDESTRIAN COUNTERMEASURES

Mr. CARR. Please give some examples of research-based pedestrian countermeasures?

[The information follows:]

The Child pedestrian crashes from a large part of the problem. Children are involved in dart out crashes, ice-cream vendor accidents, intersection-related crashes, and school bus accidents, among others. The agency has targeted these problems with some success. For example, in the case of the largest crash problem, the dart out, the agency developed safety advice that corrected the errors made by the child, i.e, entering the roadway without stopping or searching for oncoming vehicles. When incorporated into safety messages using an animated character, "Willy Whistle", and tested in large school systems, the countermeasure was successful in reducing child pedestrian dart out crashes in five- to eight-year olds by 20 percent. A second Willy Whistle video was directed at the more complex traffic situations children get into as they get older (ages 9–12) and travel beyond their immediate neighborhoods. Field tests by the Insurance Institute for Highway Safety found crash reductions of 20-30 percent in the crash types addressed by the program for this age group. Finally, a good example of developing traffic regulations as countermeasures is NHTSA's Model Ice Cream Truck Ordinance (MICTO). The model regulation focuses on the problem of young children who are struck going to or from an ice cream truck. A field test of the ordinance in the City of Detroit, Michigan, demonstrated a 77 percent reduction in this type of crash.

## UNDERSERVED POPULATIONS IN PEDESTRIAN AND BICYCLE SAFETY

Mr. CARR. The justifications indicate that development will be conducted in fiscal year 1994 on an education program for underserved populations. How do you define underserved populations in the pedestrian and bicycle safety area?

[The information follows:]

Underserved populations are those populations that constitute an identifiable part of the pedestrian and bicycle crash problem, but for which fewer programs or countermeasures exist to address the *specific* nature of their problems (e.g., language and/or cultural differences which may contribute to the problem). Underserved populations would include diverse populations such as Hispanics, African Americans and Native Americans.

## WALK ALERT PEDESTRIAN SAFETY PROGRAM

Mr. CARR. What are the program elements of the "Walk Alert" pedestrian safety program and how has it been effective?

[The information follows:]

The "Walk Alert" concept is a product of a joint effort between NHTSA, FHWA and the National Safety Council. This collaboration resulted in the "Walk Alert National Pedestrian Safety Program Guide." This guide is designed to help states plan and implement comprehensive pedestrian safety programs which incorporate education, engineering, and enforcement principles.

The education section of the guide covers different age groups and the conditions and problems unique to each of these age groups. The engineering section discusses possible conflicts and solutions relative to physical facilities such as roadways, sidewalks, and traffic control devices. The enforcement section identifies ways in which states and communities can work with law enforcement agencies to create a pedestrian safety program.

The Walk Alert program guide also provides guidance for communities on "how-to" organize Walk Alert committees and implement component activities. A media section is included to assist in developing and conducting successful media campaigns. A resource section identifies sources of materials available to be used in a successful pedestrian safety program.

Walk Alert programs were established in 10 states between 1986 and 1989. Responses concerning the usefulness of the program guide and its effectiveness for helping state and local officials establish comprehensive pedestrian programs have been very positive. There have been no formal evaluations conducted to determine crash reduction.

## NHTSA/FHWA SAFETY RESOURCE KIT

Mr. CARR. Please give some examples of the information on behavioral and engineering aspects of pedestrian safety provided to safety planners in the NHTSA/FHWA safety resource kit.

[The information follows:]

Following is a description of the major components of the NHTSA/FHWA pedestrian safety resource kit:

*Walk Alert: A National Pedestrian Safety Program Guide.* This guide is intended to assist states and communities to establish effective pedestrian safety programs. It discusses what actions states and communities can take to protect pedestrians by developing community awareness, safe pedestrian habits and safe pedestrian environments.

*Pedestrian Accident Reduction Guide (PAR).* This widely used document provides a taxonomy of behaviors that accompany the most common pedestrian crash types. Directions are provided for implementing countermeasures which can have the greatest impact on reducing these crash types.

*Planning Community Pedestrian Safety Programs.* This manual contains information to assist individuals and groups in developing comprehensive action plans to improve pedestrian safety within a community.

*Synthesis of Safety Research on Pedestrians.* This publication provides both behavioral and engineering-related countermeasure information. It includes conflict analysis, hazard formulas and a discussion of pedestrian safety programs. Although primarily designed for traffic engineers, this document discusses basic behavioral factors that contribute to pedestrian crashes, thus aiding engineers in their ability to address these factors in the design of pedestrian facilities.

*Work Zone Traffic Management Synthesis: Work Zone Pedestrian Protection.* This report contains research findings and descriptions of current practices in controlling and protecting pedestrian traffic in work zones. The report provides an assessment of state-of-the-art practices and has recommendations for revisions of the *Manual on Uniform Traffic Control Devices.*

*Law Enforcement: Pedestrian Safety.* This strategies manual provides effective countermeasures for law enforcement agencies wishing to address pedestrian safety issues.

## REPORT TO CONGRESS ON PEDESTRIAN INJURY REDUCTION RESEARCH

Mr. CARR. NHTSA's report to Congress on pedestrian injury reduction research indicates that the research program directed toward exploring the feasibility of reducing the consequences of pedestrian vehicle impacts was suspended during the summer of 1992 pending agency review of the direction of the program. What are the results of that review?

[The information follows:]

A primary reason for suspending the research is that NHTSA's understanding of how people were being injured and killed in pedestrian-vehicle impacts was based on data collected in the late 1970's, and that vehicle design had changed substantially since that time. At the same time, pedestrian fatalities had been decreasing substantially in the late 1980s and early 1990s. Vehicle design changes that are relevant are the much shorter, sloping front ends of cars. This moves the likely head and thorax impact areas up toward the cowl area from the hood area. This was demonstrated during the research program through computer modeling. NHTSA decided that it needed more recent pedestrian-vehicle impact information and is beginning a three-year effort to collect such data in a NASS special study. A decision to resume the research before this data collection effort is complete is still being considered.

## OCCUPANT PROTECTION PROGRAM

Mr. CARR. You are requesting $2.213 million for the occupant protection program in fiscal year 1995. Please explain how the request implements the Secretary's belt use initiative.

[The information follows:]

Funding for the occupant protection program is broken down into four components as follows: 1) public information and education ($2.213 million); 2) belt law compliance ($1.704 million); 3) target populations ($1.321 million); and evaluation assistance and technology sharing ($0.451 million).

The Secretary's initiative to increase safety belt use and decrease alcohol-related fatalities will urge states to conduct combined public information and enforcement efforts, quarterly action programs, and periodic highly visible enforcement efforts.

NHTSA program efforts will support these activities by providing program development, public information materials, training programs, organizational outreach, and technical assistance to enhance state and local efforts to: 1) upgrade their safety belt use laws to include primary enforcement, broader coverage and stricter sanctions; 2) enforce these laws and provide public information support for such efforts; and 3) conduct reliable and valid safety belt usage surveys to measure progress.

Research studies and the results of recent program demonstrations in the U.S. and Canada have shown that these strategies provide the best known potential for achieving the goals of the Secretary's initiative.

Mr. CARR. What are highest priority activities that you plan to conduct in the occupant protection program in fiscal year 1995?

[The information follows:]

The highest priority is to support the two-year national campaign to achieve the Secretary's goal of reducing alcohol-related fatalities to 43 percent and increasing the national belt use rate to 75 percent by 1997. States have taken the lead by identifying the goals they expect to achieve by 1997.

This campaign, scheduled to begin with the first quarter of fiscal year 1995, will incorporate three strategic features.

First, NHTSA will implement a quarterly schedule for program material dissemination and emphasis, one that should result in a more coordinated national traffic safety agenda.

Second, NHTSA will urge states and communities to conduct periodic, highly publicized enforcement efforts, such as those used in North Carolina.

Third, NHTSA will urge implementation of combined programs to enhance efficiency and impact, such as media and enforcement efforts that address both impaired driving and seat belt usage.

Mr. CARR. What would be the impact of holding funding for the occupant protection program to the 1994 level and what activities would not be conducted in fiscal year 1995?

[The information follows:]

Reducing the fiscal year 1995 request of $5,689 thousand to the fiscal year 1994 level of $5,112 thousand would limit the Agency's ability to support state and local public information and enforcement efforts and it would curtail the ability to demonstrate the impact of innovative belt law enforcement strategies.

The current plan is to provide public information and technical guidance materials to the states on a quarterly basis to support their combined quarterly action programs. This will be difficult and somewhat more costly to accomplish than past efforts because of the proposed quarterly distributions.

However, the potential of this approach for stimulating effective public information and enforcement programs at the state level is substantial.

If materials cannot be provided to support the proposed quarterly action programs, states will have more difficulty in reaching their individual belt use goals. Consequently, if the states do not meet their goals, the Secretary's 75 percent national belt use rate goal will not be met.

## AUTOMATIC RESTRAINT SYSTEMS

Mr. CARR. NHTSA's 1993–1994 Priority Plan indicates that a follow-up report on the effectiveness of various types of automatic restraint systems, their costs and benefits would be published by NHTSA in fall 1993. Was this evaluation completed and, if so, what were its findings?

[The information follows:]

We are awaiting completion of the 1993 Fatal Accident Reporting System (FARS) file to support analyses for this evaluation. A preliminary analysis of the effectiveness of automatic restraints, as used, based on FARS data for the first half of 1993 indicated little change from those in our report to Congress on this subject that was submitted at the end of 1992. These results, which are summarized below, will be reported in a paper that will be presented at the ESV Conference in May.

### *AUTOMATIC RESTRAINT SYSTEM EFFECTIVENESS*

[Fatality Reduction, in Percent Relative to Manual Belts at 1983 Use Rates]

| Automatic Restraint Equipment in Cars: | *Percent* |
|---|---|
| Manual Belts Only | 14 |
| Air Bags | 23 |
| Motorized Belts without Disconnect | 19 |
| Motorized Belts with Disconnect | 14 |
| Nonmotorized 3 Point Belts | 14 |
| Nonmotorized 2 Point Belts | 11 |
| Weighted Average | 20 |

We have also conducted tear-down studies of the cost of various types of automatic restraints. From those studies we have the following information on cost:

### FRONT SEAT AUTOMATIC RESTRAINT SYSTEM ESTIMATED COST

| Make and Line of Vehicle | Restraint System | Consumer Retail Cost |
|---|---|---|
| 1992 Ford Crown Victoria | Dual Air Bags | $329 |
| 1992 Acura Legend | Dual Air Bags | 482 |
| 1992 Toyota Camry | Driver Air Bags | 305 |
| 1992 Buick Roadmaster | Driver Air Bags | 304 |
| 1992 Plymouth Acclaim | Driver Air Bags | 224 |
| 1992 Chevrolet Camaro | Driver Air Bags | 182 |
| 1991 Toyota Tercel | 2 Pt, Nonmotorized | 79 |
| 1988 Toyota Corolla | Manual Belts | 39 |
| 1988 Plymouth Acclaim | Manual Belts | 52 |
| 1988 Chevrolet Caprice | Manual Belts | 38 |

### HEALTH CARE BENEFITS FROM USING SAFETY BELTS

Mr. CARR. Since the highest risk drivers and occupants tend to be the last to use safety belts, the greatest benefits of safety belts will likely be realized when the final holdouts eventually buckle up. What are the estimated health care costs that could be saved if all motor vehicle occupants used their safety belts?

[The information follows:]

Based on a preliminary analysis, NHTSA estimates that increasing safety belt use rates in all passenger vehicles from current observed levels of 66 percent to 100 percent would save between $5 billion and $7 billion in health care costs.

### SEAT BELT ENFORCEMENT

Mr. CARR. What evidence does NHTSA have that seat belt enforcement at the local level is improving?

[The information follows:]

NHTSA does not have a system in place for gathering local level enforcement data. As part of the national emphasis program conducted in 1991 and 1992, citation data were collected through Operation C.A.R.E., which is a holiday law enforcement program involving state police agencies. These data did show an increase in belt law citation rates [per 100,000 population] for state police agencies that participated in the program during the summer months of 1991–93, as compared to what they were in 1990.

In addition to these data, several states have provided evidence of increases in citations by either state police or a combination of state and local police.

As part of the new national campaign to achieve the Secretary's goals for 1997, NHTSA will be asking states to provide some local enforcement information such as the number of jurisdictions within a state that conduct Special Traffic Enforcement Programs (STEPs). These are highly publicized belt and/or alcohol-impaired driving enforcement efforts.

## STATES SAFETY BELT USE RATE GAINS

Mr. Carr. Which states have achieved the greatest gains in improving safety belt use rates in the past several years and what were the reasons for gains in each state?

[The information follows:]

Sixteen states increased belt use by ten or more percentage points between 1991 and 1993. The state with the greatest gain, Delaware. increased belt use by 26 points, from 42 percent to 68 percent, by enacting a belt use law. Nebraska also made a major gain by enacting a belt use law, increasing 21 points from 33 to 54 percent.

North Carolina increased use by 20 points, from 60 to 80 percent, primarily through implementation of Special Traffic Enforcement Programs (STEPs). These STEPs, consisting of highly visible belt law enforcement, resulted in a gain of 15 points during 1993 alone.

Another state which accomplished a large increase during 1993 is California. California was the first state to upgrade an existing belt use law from secondary to primary enforcement. This upgrade resulted in an increase of 12 percentage points, from 71 to 83 percent.

## PRIMARY SAFETY BELT ENFORCEMENT LAWS

Mr. Carr. Which states have primary safety belt enforcement laws and how effective have these laws been in increasing use rates in these states?

[The information follows:]

Ten states and Puerto Rico have safety belt use laws that allow for primary enforcement. These states are California, Connecticut, Hawaii, Iowa, Mississippi, New Mexico, New York, North Carolina, Oregon and Texas.

The population-weighted average belt use among the primary enforcement states is 12 points higher than that of the states which specify secondary enforcement (75 percent versus 63 percent use, respectively).

California recently upgraded its belt law from secondary to primary enforcement, providing an opportunity to evaluate the effect of this provision. In the year following implementation of this upgrade, belt use in California increased by 13 percentage points, from 70 to 83 percent.

## SEAT BELT USE ENFORCEMENT MECHANISM

Mr. Carr. Do any states use a demerit point system similar to that used in Canada as a seat belt use enforcement mechanism and should NHTSA be encouraging states to adopt stronger enforcement measures along these lines?

[The information follows:]

Currently, no states issue driver's license demerit points to safety belt law violators. NHTSA encourages states to establish belt law penalties that are appropriate for conditions in the state.

State belt law penalties need to be strong enough to have the intended deterrence effect, but not so severe that they turn public opinion against the belt law or deter law enforcement officers from issuing citations. The optimal penalty level varies from state to state depending on factors such as belt usage rates, the length of time that the state has had the law, and public and police attitudes toward belt law enforcement.

Canada has demonstrated that demerit points can be used effectively with belt laws, at least in some situations. Specifically, our Canadian counterparts indicate that, once high levels of belt usage are achieved, demerit points seem to have a greater deterrent effect on the remaining "hard-core" non-users than do monetary penalties.

## STEP DEMONSTRATION GRANTS

Mr. CARR. Which states received grants during fiscal year 1993 for Selective Traffic Enforcement Programs (STEP) demonstrations and what were the results?

[The information follows:]

NHTSA awarded five STEP Demonstration Projects in September, 1993 to: (1) Vermont for $300,000; (2) South Carolina for $299,938; (3) New Mexico for $255,000; (4) Oregon for $150,000; and (5) Washington for $150,000. (Oregon and Washington are conducting a joint program).

Only New Mexico has reported results to date. In February, it conducted the first of four scheduled statewide occupant protection blitz campaigns and reported the following preliminary results:

Statewide belt use rates for front seat occupants increased from 71 to 79 percent. Fifty-two law enforcement agencies participated including 28 City Police Departments, 11 Sheriff's Departments and 13 State Police Districts. During the 2-week enforcement emphasis period participating agencies issued a total of 6,873 occupant protection citations—6,277 for seat belt violations and 596 for child restraint violations.

Vermont, Washington and Oregon have already conducted at least one joint blitz effort in February, but they have not provided the results of that effort.

South Carolina will begin their enforcement blitz efforts in May.

Mr. CARR. Which states will receive STEP grants during fiscal year 1994 and why are additional awards planned for fiscal year 1995?

[The information follows:]

NHTAS first planned to award two STEP grants each year in 1993 and 1994. To increase the potential impact of such demonstrations, awards were made to five states in 1993, with Oregon and Washington conducting a joint program. Grant funding is spread over the two-year period as follows:

| State | Fiscal year | |
|---|---|---|
| | 1993 | 1994 |
| Vermont | $150,000 | $150,000 |
| South Carolina | 150,000 | 149,938 |
| New Mexico | 150,000 | 105,000 |
| Oregon | 75,000 | 75,000 |
| Washington | 75,000 | 75,000 |

To obtain a representative geographical mix of states conducting STEP demonstrations, one additional grant award is currently under negotiation in fiscal year 1994. No further STEP demonstrations are planned for award in 1995.

Beginning in 1995, support will be provided to all states actively pursuing statewide alcohol/belt STEP programs. This support will take the form of increased levels of enforcement-related media, training, and other program materials provided to the states and local communities.

The level of state participation and the results achieved under this new approach will constitute a national demonstration of the impact of highly publicized enforcement efforts stimulated through dissemination of program results and materials.

For those states which participate, this approach should alleviate them of the costs associated with preparing their own program materials. Those savings should enable the participating states to strengthen and expand the enforcement and public outreach components of their programs.

## NORTH CAROLINA'S "CLICK IT OR TICKET" PROGRAM

Mr. CARR. Please describe the elements of North Carolina's "Click it or Ticket" program which resulted in a 13 percent increase in seat belt usage in that state. Which program elements could be readily applied in other states?

[The information follows:]

The three basic parts of the state-wide "Click It or Ticket" program are: 1) education of the public through targeted paid and earned media, in addition to "hard" news coverage; 2) enhanced statewide enforcement of safety belt and child safety seat laws through random patrols and safety belt checkpoints; and 3) incentives for motorists found complying with these laws at checkpoints. To support the media component, the Governor of the State lent his person support to this five-year initiative through all forms of media coverage. Two weeks after the targeted media phase began, enhanced enforcement of the primary occupant protection laws began by state, county and municipal law enforcement agencies in all 100 counties of North Carolina, The Governor personally solicited support for the program in all communities. The State Insurance Commissioner helped galvanize the agenda. Incentives were awarded at checkpoints, and citations issued to those not in compliance. Surveys were conducted to measure proper compliance with the safety belt and child safety seat laws.

All program elements can be readily applied in other states, namely; focused media activities; support by key community officials and leaders; endorsement of the law enforcement community; safety belt use and enforcement training for officers; enhanced enforcement with highly visible checkpoints; broad-based community support; countrywide enforcement; tickets given to violators; and incentives awarded to motorists.

Mr. CARR. What was NHTSA's role in the North Carolina program?

[The information follows:]

NHTSA's role in "Click It or Ticket" consisted of direct involvement and active participation in the development, planning and implementation of the Governor's Highway Safety Initiative. NHTSA is one of five major public/private partners represented in the campaign. The others are the NC Department of Insurance, the NC Department of Transportation Governor's Highway Safety Program, the University of North Carolina Highway Safety Research Center, and the Insurance Institute for Highway Safety. The most critical element was the North Carolina law enforcement community,

The Initiative really began about three years ago with the implementation of the Section 403 Operation Buckle Down (OBD) program and the groundwork laid by the OBD coordinators. In conjunction with the OBD program, NHTSA Occupant Protection Usage and Enforcement training was marketed and conducted, training hundreds of officers throughout the state. Section 402 safety belt and child safety seat mini-grants were awarded to local police departments and health departments for the development of community belt programs, allowing those with limited resources to become actively involved in the safety belt program by conducting Click It or Ticket campaigns in local communities throughout the state. These were precursors to the implementation of the statewide Governor's Highway Safety Initiative (Click It or Ticket).

NHTSA's Region IV office serves on the executive steering committee for the Initiative. They have participated in the development of the overall campaign strategy and reviewed and participated in the selection of the advertising strategies and media message, playing an active role in the planning and implementation of regional informational meetings with local law enforcement officials and participating in briefings with the Governor. NHTSA was a full partner in the planning of the pilot sites and provided technical advice and recommendations on the operational phase of the campaign. NHTSA Region IV, in cooperation with the Governor's Highway Safety Program, has worked to incorporate the Initiative as part of North Carolina's overall highway safety program, as expressed in their Highway Safety Plan and will continue to be a full participating partner in the Initiative.

## SAFETY BELT USAGE—NATIONAL SURVEY

Mr. CARR. The justifications indicate that NHTSA is considering initiating a national survey of safety belt usage. Does this indicate that the state surveys of safety belt usage are unreliable and of poor quality?

[The information follows:]

The need for a national survey of occupant restraint use does not indicate that state surveys are of poor quality. In fact, the quality of state safety belt use surveys is very good. NHTSA supported the development of high quality state surveys through the development of survey guidelines and the agency review which were required under Section 153 of the Intermodal Surface Transportation Efficiency Act. However, while state safety belt use surveys are valuable tools for designing and evaluating state safety belt programs, there are limitations to the state surveys which prevent them from meeting all of the agency's restraint use information needs—research, program, evaluation, and regulatory. For instance, state surveys generally provide use information only for front-seat outboard occupants and either combine passenger car and light truck occupants or only collect information on passenger cars. States rarely, if ever, collect information on the type and use of different restraint systems, e.g., manual us. automatic or 3-point vs. 2-point, detailed information that is necessary to support agency research programs, behavioral programs and regulatory impact analyses/evaluations in the area of occupant protection.

It should also be noted that this survey will collect data on child safety seat usage and motorcycle helmet usage. Presently the agency does not have any mechanism for collecting such data. This information is needed to enable the agency to better measure its performance as prescribed under the Government Performance and Results Act of 1993 (GPRA).

Mr. CARR. Why do you believe that a national survey is needed?

[The information follows:]

The national restraint use survey will provide detailed national estimates of belt use characteristics to assist in evaluating the effectiveness of motor vehicle safety standards and help determine the agency's national restraint use program priorities. The national survey design will include collection information on vehicle type, occupant type (driver vs. passenger), road type, age and sex group, motorcycle helmet use, and some information on child safety seat use. State surveys do not provide this detailed restraint use information.

Mr. CARR. How would the national survey be designed and conducted, and what would be its total cost?

[The information follows:]

The national survey will be designed as a multi-stage area probability sample. Direct observation of restraint use will be conducted at about 4,000 observation sites across the country during daylight hours. The design cost is approximately $130,000. The collection cost is budgeted at $350,000 for FY 1994.

Mr. CARR. When would the results of a national survey be available?

[The information follows:]

Plans are to conduct the survey in September 1994, and the results should be available by the end of 1994.

## STATE SEAT BELT USAGE SURVEYS

Mr. CARR. For the record, please provide the state-by-state results of the 1993 state seat belt usage surveys.

[The information follows:]

## OBSERVED SAFETY BELT USE RATES
## REPORTED BY STATES
## AS OF DECEMBER 1993

| | | | |
|---|---|---|---|
| Alabama | 55% | Montana | 71% |
| Alaska | 69% | Nebraska | 54% |
| Arizona | 73% | Nevada | 70% |
| Arkansas | 55% | New Hampshire | 51% |
| California | 83% | New Jersey | 71% |
| Colorado | 53% | New Mexico | 75% |
| Connecticut | 71% | New York | 72% |
| Delaware | 68% | North Carolina | 80% |
| Dist. of Columbia | 62% | North Dakota | 30% |
| Florida | 62% | Ohio | 58% |
| Georgia | 57% | Oklahoma | 47% |
| Hawaii | 84% | Oregon | 73% |
| Idaho | 58% | Pennsylvania | 68% |
| Illinois | 67% | Rhode Island | 32% |
| Indiana | 56% | South Carolina | 59% |
| Iowa | 73% | South Dakota | 26% |
| Kansas | 70% | Tennessee | 58% |
| Kentucky | 40% | Texas | 69% |
| Louisiana | 48% | Utah | 50% |
| Maine | 36% | Vermont | 54% |
| Maryland | 72% | Virginia | 73% |
| Massachusetts | 34% | Washington | 78% |
| Michigan | 64% | West Virginia | 52% |
| Minnesota | 55% | Wisconsin | 64% |
| Mississippi | 25% | Wyoming | N/A |
| Missouri | 70% | Puerto Rico | 73% |

Population-Weighted Average = 66%

## SAFETY BELT USE DATA

Mr. CARR. What data does NHTSA have regarding safety belt use among high risk, underserved, and culturally diverse groups, such as persons under age 21, minorities, truck drivers, young males, et cetera, and what is the source of the data?

[The information follows:]

NHTSA uses the fatal crash reports from the Fatal Accident Reporting System (FARS) and data on injury crashes from the General Estimates Systems (GES) to identify potential at-risk groups. While these data bases provide information on age, gender, vehicle type, and crash location (urban/rural), they do not provide information on ethnicity. Overall, NHTSA crash data indicates that young males are at particular high risk. Rural areas are also overrepresented.

In addition to crash data, every state, except Wyoming, collects periodic observational survey data, some of which includes information on population subgroups. This data supports the age and gender biases indicated by the crash data.

Several special studies have been conducted to assess use among high risk populations. Among this was an April 1988 NHTSA study which confirmed that safety belt non-users were overrepresented in crashes.

Studies are currently underway to determine use among several ethnic groups, such as Hispanics and Native Americans. These studies will help in developing strategies to increase use among these populations. Further research will be conducted to better assess belt use in other targeted ethnic populations.

## SAFETY MESSAGE PERCEPTIONS

Mr. CARR. What does NHTSA's research on gender differences in the perception of safety messages show and what are its implications for the development of occupant protection messages aimed at women and men?

[The information follows:]

In 1992, NHTSA sponsored a focus group study of women and men to investigate gender perceptions of traffic safety messages. A separate task provided for a literature review on gender differences in response to traffic safety, commercial, and health-related messages. The literature review revealed little information about gender message responses.

The eight focus groups involved a total of 28 men and 32 women, aged 25 to 59. Participants were shown seven 30-second television PSAs dealing with speeding, drinking and driving, and safety belt use. A variety of motivational themes were used. There were many similarities between men and women, but in some cases their responses diverged sharply.

Both men and women said they wanted examples of effective interventions; wanted the age of the presenter to be close to their own; were receptive to appeals that had costly sanctions; and preferred to see realistic settings, common situations, and personal relevance in traffic safety PSAs.

Female participants generally responded more favorably to emotional appeals, were less accepting of humor, were less concerned with production quality, objected less to exhortation or authoritative appeals, and were more likely to perceive PSA information as relevant to family and friends.

This information is based on a small, non-random sample population. Additional information is needed to better clarify the nature and extent of gender issues related to developing effective traffic safety messages. Since the initial work indicated some difference, NHTSA will continue to explore this issue. Until more definitive information on gender responses is available, NHTSA will continue to develop traffic safety messages aimed at the general public and complementary to the overall program occupant protection program.

## SEAT BELT USE EDUCATION—ASSISTANCE TO PRIVATE SECTOR

Mr. CARR. Your justifications indicate that $105,000 will be used to provide assistance to the private sector to educate employees and clients about seat belt use. What activities do you have in mind and why do you believe they are justified? What are the expected benefits?

[The information follows:]

Working through the Network of Employers for Traffic Safety (NETS), NHTSA will: a) build on its existing program to establish an electronic bulletin board offering employers access to a variety of traffic safety resources; b) modify the existing 8-hour traffic safety management training seminar to allow flexibility in training; c) share results from a current demonstration project to reach youth in the workplace; d) expand the number of employers involved in traffic safety efforts from 1300 to 2000; and e) develop promotional materials for use by employers.

On a separate track, the National Safety Belt Coalition will continue to work with a variety of clients, including employers, to implement safety belt education efforts for both employees and customers.

Motor vehicle crashes are the number one cause of lost work time and deaths among the work force. They cost employers about $181 billion annually. Thus, more employers are recognizing the importance of implementing policies and programs to encourage safe driving practices. Companies that have implemented effective traffic safety programs have been able to reduce their costs associated with traffic crashes.

### SECTION 153 INCENTIVE AWARDS

Mr. CARR. Please update the table on pages 356 through 357 of last year's hearing record, providing the fiscal year 1994 awards to date for the Section 153 program.

[The information follows:]

### SECTION 153 INCENTIVE PROGRAM
### FY 1992 - FY 1994

| LIST OF STATES | FY 1992 AWARDS (actual) | FY 1993 AWARDS (actual) | FY 1994 AWARDS** (estimated) |
|---|---|---|---|
| Alabama* | $426,622 | $479,736 | 0 |
| Arkansas* | 285,830 | 175,180 | 0 |
| California* | 2,023,396 | 0 | 2,179,829 |
| Dist. of Col. | 118,943 | 133,751 | 0 |
| Florida* | 0 | 0 | 0 |
| Georgia* | 569,883 | 640,831 | 0 |
| Kentucky* | 0 | 0 | 408,006 |
| Louisiana | 403,004 | 453,177 | 0 |
| Maryland* | 0 | 404,189 | 387,228 |
| Massachusetts | 0 | 0 | 519,518 |
| Michigan* | 871,716 | 980,243 | 939,111 |
| Mississippi* | $296,230 | 0 | 0 |
| Missouri* | 0 | 335,306 | 0 |
| Nebraska | 0 | 286,162 | 0 |
| Nevada | 126,333 | 142,061 | 136,100 |
| New Jersey | 605,522 | 680,908 | 652,336 |
| New York | 1,486,363 | 1,671,412 | 1,601,277 |
| North Carolina* | 581,465 | 653,857 | 626,420 |
| Oregon* | 336,255 | 378,117 | 362,251 |
| Pennsylvania* | 1,065,250 | 1,197,871 | 1,147,606 |
| Tennessee* | 100,000 | 125,000 | 0 |
| Texas* | 1,514,734 | 1,703,315 | 1,631,841 |
| Vermont | 0 | 0 | 128,139 |
| Virginia* | 501,509 | 563,946 | 540,282 |
| Washington* | 431,521 | 485,244 | 464,882 |
| West Virginia | 0 | 222,468 | 0 |
| Puerto Rico | 255,424 | 287,226 | 275,174 |
| TOTAL | $12,000,000 | $12,000,000 | $12,000,000 |

NOTE

* Minimum Allocation State in FY 1994

** Estimated Total FY 1994 Funding Level

Mr. CARR. Were any applicant states denied Section 153 grants in fiscal years 1992 and 1993 because they did not meet the targets for seat belt and motorcycle helmet use?

[The information follows:]

Fiscal year 1992 was the first year of the Section 153 incentive grant program. For first year grants, states are required to have both a safety belt use and motorcycle helmet use law in effect. Therefore, achieving specific usage rates for a grant was not a factor.

For fiscal years 1993 and 1994, states—knowing what the usage rate requirements are for second and third year grants—have not submitted applications if they did not meet the target rates. Consequently, NHTSA has not had to deny any state's application. However, combining fiscal years 1993 and 1994, seven (7) states have failed to apply because their safety belt use rate was below the rate required for grant eligibility. These states are: Alabama, Arkansas, Georgia, Louisiana, Mississippi, Tennessee, and the District of Columbia.

## SECTION 153 SANCTIONS

Mr. CARR. Please provide a table that shows the number of states that will be affected by the ISTEA Section 153 sanctions, the amounts of Federal aid highway funds estimated to be transferred to state highway safety programs and the regular Section 402 State allocations estimated under the fiscal year 1995 budget proposal.

[The information follows:]

## REGIONAL OPERATIONS
## SECTION 153 TRANSFER PENALTY

| LIST OF STATES | SAFETY BELT LAW | UNIV HELMET LAW | EST. FY 1995 TRANSFER @1 1/2% NHS, STP, CMAQ | EST. FY 1996 TRANSFER @3% NHS, STP, CMAQ | ESTIMATED FY 1995 §402 APP'MNT |
|---|---|---|---|---|---|
| Alaska | X | | 2,865,229 | 5,730,458 | 638,735 |
| Arizona | X | | 2,100,246 | 4,200,492 | 1,790,311 |
| Colorado | X | | 1,930,348 | 3,860,696 | 1,829,894 |
| Connecticut | X | | 2,461,515 | 4,923,031 | 1,371,182 |
| Delaware | X | | 746,747 | 1,493,494 | 638,735 |
| Hawaii | X | | 1,326,003 | 2,652,005 | 638,735 |
| Idaho | X | | 1,266,453 | 2,532,905 | 830,465 |
| Illinois | X | | 6,222,136 | 12,444,272 | 5,284,379 |
| Indiana | X | | 2,794,077 | 5,588,153 | 2,766,037 |
| Iowa | X | | 2,047,611 | 4,095,223 | 1,906,422 |
| Kansas | X | | 1,722,810 | 3,445,619 | 1,961,227 |
| Kentucky* | $\text{X}_{7/13/94}$ | X | 2,174,129 | Will Comply | 1,921,524 |
| Maine | | | 827,817 | 1,655,634 | 638,735 |
| Massachusetts* | $\text{X}_{2/1/94}$ | X | 1,797,953 | Will Comply | 2,487,710 |
| Minnesota | X | | 2,164,265 | 4,328,529 | 2,629,371 |
| Montana | X | | 1,578,887 | 3,157,773 | 846,120 |
| New Hampshire | | | 835,500 | 1,671,000 | 638,735 |
| New Mexico | X | | 1,942,827 | 3,885,653 | 1,038,398 |
| North Dakota | x | | 1,176,221 | 2,352,441 | 914,704 |
| Ohio | X | | 4,650,801 | 9,301,601 | 4,892,219 |
| Oklahoma | X | | 2,099,468 | 4,198,936 | 2,041,220 |
| Rhode Island | X | | 666,827 | 1,333,653 | 638,735 |
| So. Carolina | X | | 1,902,502 | 3,805,004 | 1,788,432 |
| So. Dakota | $\text{X}_{2/25/94}$ | | 1,300,464 | 2,600,928 | 909,558 |
| Utah | X | | 1,133,268 | 2,266,537 | 974,482 |
| Vermont* | $\text{X}_{1/1/94}$ | X | 695,976 | Will Comply | 638,735 |
| Wisconsin | X | | 2,398,679 | 4,797,358 | 2,668,979 |
| Wyoming | X | | 1,071,546 | 2,143,092 | 638,735 |
| TOTAL | | | $53,900,305 | $98,464,487 | $45,962,514 |

X = State has an acceptable law for Section 153 purposes.
28 States not in compliance to avoid the FY 1995 fund transfer.

* Massachusetts' safety belt law did not go into effect until 2/1/94; Vermont's safety belt law did not go into effect until 1/1/94; and Kentucky's Governor signed law 3/9/94 & effective date about 7/13/94. Therefore, the States did not comply as of 10/1/93.

FY 1995 and FY 1996 percentages are based on estimates of State allocations for NHS, CMAQ and STP for FY 1994.

Actual apportionments to individual States may vary somewhat from these estimates.

## FUNDING FOR SEAT BELT RELATED ACTIVITIES

Mr. CARR. Including all sources [Section 402, Section 153, highway safety, research, et cetera), how much funding is requested for seat belt-related activities in fiscal year 1995, and how does that compare to fiscal years 1994 and 1993?

[The information follows:]

### OCCUPANT PROTECTION FUNDING

[In thousands of dollars]

| Funds | Fiscal year— | | |
|---|---|---|---|
| | 1993 | 1994[1] | 1995[1] |
| § 153 | [2] $9,600 | [2] $9,600 | [2] 0 |
| § 402 | 20,470 | 22,013 | $22,013 |
| § 403 | 6,189 | 6,442 | 5,359 |
| Total | 36,259 | 38,055 | 28,372 |

[1] Estimates are shown in fiscal years 1994 and 1995.

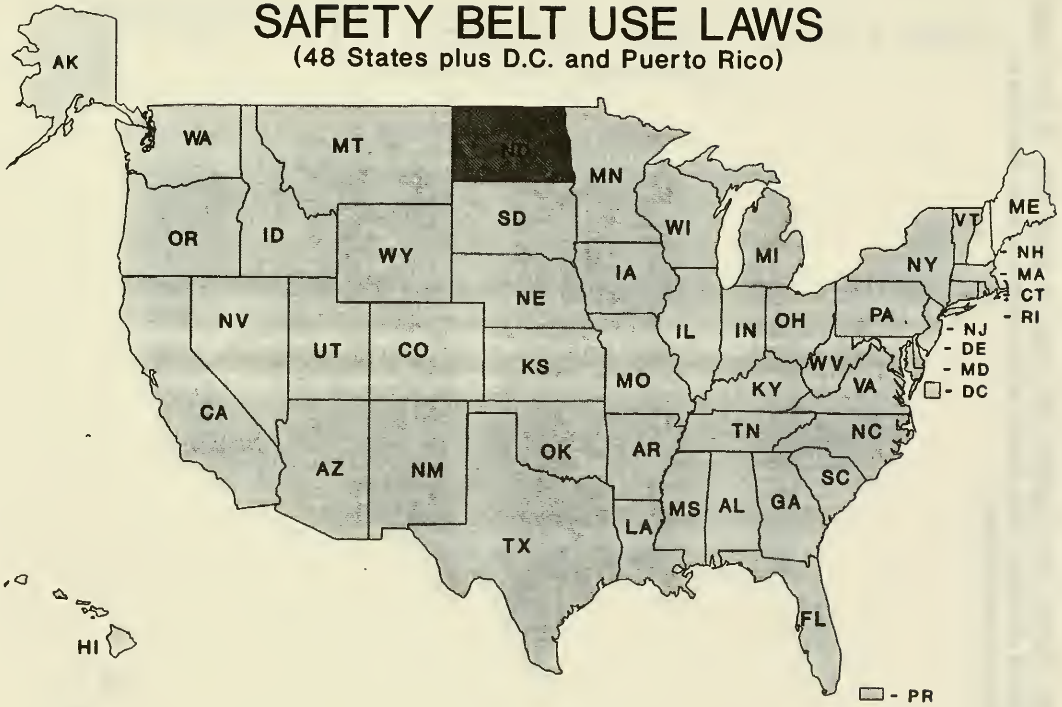
[2] Approximately 80% of Section 153 funds are used in the occupant protection program area. Fiscal year 1994 is the last year of the Section 153 incentive grant program.

## MANDATORY SEAT BELT USE LAW BY STATE MAP

Mr. CARR. Please also update the U.S. map on page 404 of last year's hearing record showing the states with mandatory belt use laws.

[The information follows:]

# SAFETY BELT USE LAWS
(48 States plus D.C. and Puerto Rico)



▨ SBU LAW

KY Law effective July 13, 1994
SD Law effective January 1, 1995

☐ NO SBU LAW (NH and ME)

■ ND effective 8/1/93 (suspended effective date pending June 1994 election)

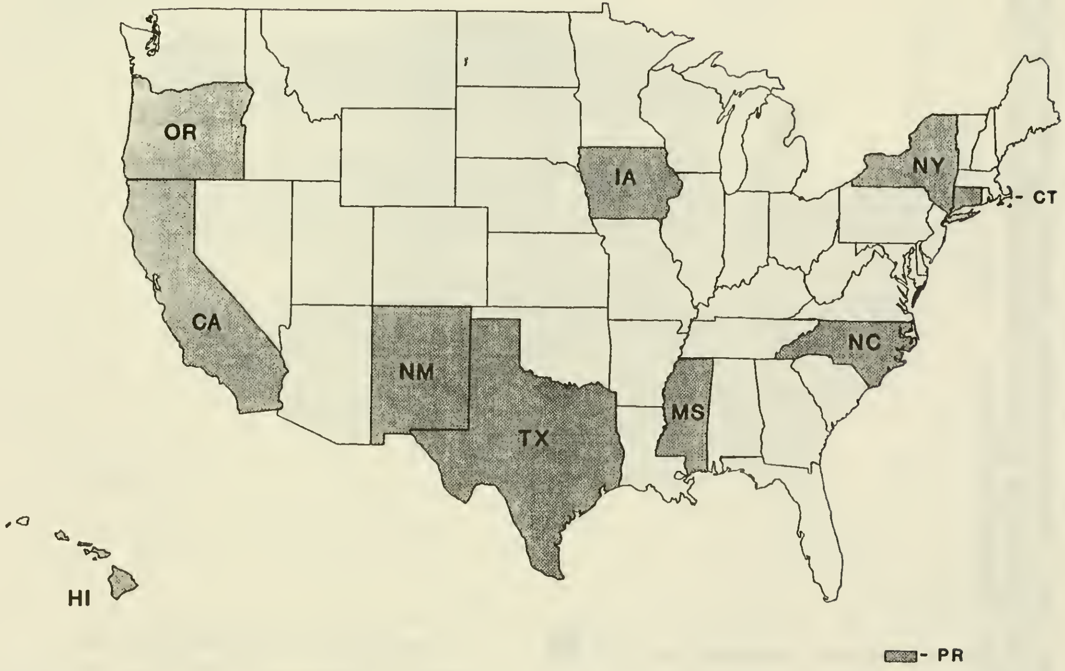
J 202

## PRIMARY BELT USE LAW STATE MAP

Mr. CARR. Please also update the map on page 406 of last year's hearing record showing the states with primary belt use laws.

[The information follows:]

## STATES WITH PRIMARY BELT USE LAWS
(10 States plus Puerto Rico)



J 203

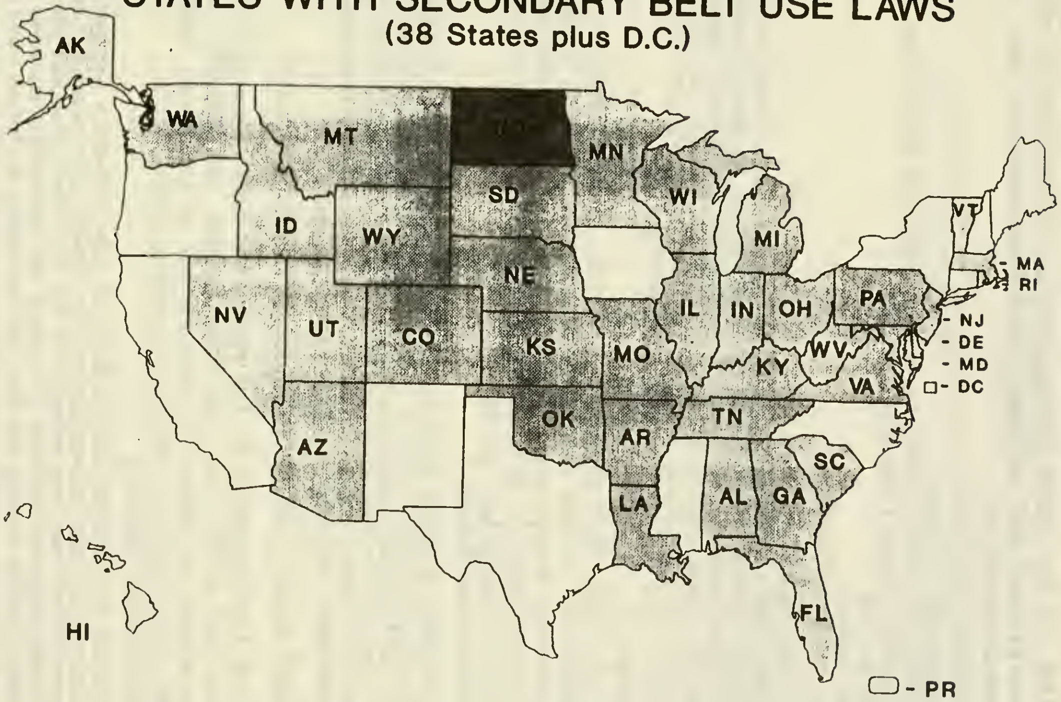
## SECONDARY BELT USE LAW BY STATE MAP

Mr. Carr. Please update the map on page 408 of last year's hearing record showing the states with secondary belt use laws.

[The information follows:]

# STATES WITH SECONDARY BELT USE LAWS

## (38 States plus D.C.)



KY Law effective July 13, 1994
SD Law effective January 1, 1995

■ ND Law effective August 1, 1993
(Law suspended pending June 1994 election)

J 204

## BELT USE LAW STATES

Mr. CARR. For the record, please provide a listing showing which states have primary belt use laws, which have secondary laws, and which have no law at all.

[The information follows:]

*Primary Safety Belt Use Laws:*

California, Connecticut, Hawaii, Iowa, Mississippi, New Mexico, New York, North Carolina, Oregon, Puerto Rico, and Texas.

Total: 10 + P.R.

*States with no laws:*

Maine and New Hampshire.

Total: 2.

*Secondary Safety Belt Use Laws:*

Alabama, Alaska, Arizona, Arkansas, Colorado, Delaware, District of Columbia, Florida, Georgia, Idaho, Illinois, Indiana, Kansas, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New Jersey, North Dakota,[1] Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, and Wyoming.

Total: 38 + D.C.

Mr. CARR. Please also provide a summary, similar to the discussion on page 409 of last year's hearing record, of those states in which legislation was proposed but not enacted during 1993, which would have provided for mandatory safety belt use or would have strengthened existing belt use laws.

[The information follows:]

In 1993, the States of Maine, Massachusetts, New Hampshire, and South Dakota proposed, but did not enact, legislation to provide for a mandatory safety belt use law. Also, in 1993, Florida, Indiana, Kansas, Louisiana, Maryland, Michigan, Minnesota, New Jersey, Oklahoma, Rhode Island, South Carolina, Tennessee, Virginia, Washington, and Wyoming proposed, but did not enact, legislation to change the enforcement level from a secondary offense to a primary offense.

## BELT USAGE AND CITATIONS IN STATE BELT USE LAWS

Mr. CARR. Please update for the record the data on usage in belt law States and safety belt violations written per 100,000 population, as shown on pages 410 through 412 of last year's hearing record, by adding data for 1992 and dropping 1989.

[The information follows:]

The information to update the table as shown on pages 410–412 is not available, because the agency no longer collects citation data. Citation data collection over the past few years has not been very accurate. On the other hand, state belt use data has become increasingly more reliable. The agency uses performance measures such as, the number of people wearing seat belts and the number of children using child safety seats, to determine a state's progress toward meeting its belt use goal.

The following is a report prepared by operation CARE (Combined Accident Reduction Effort) which includes comparable statistical data. Operation CARE began on the Fourth of July weekend in 1977 as a joint state enforcement effort. CARE is now an international traffic crash reduction program with membership that includes all 50 states, American Samoa, Guam, Puerto Rico, the Virgin Islands, Ontario, Quebec, and the Royal Canadian Mounted Police. CARE jurisdictions are grouped into ten regions, with each region combining enforcement efforts on specific highways during targeted holiday periods. CARE has concentrated its efforts on four major holiday weekends: Memorial Day, July 4th, Labor Day, and Thanksgiving.

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[1] ND Law effective 8/1/93, was suspended pending 6/94 election.

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OPERATION C.A.R.E.

1993 C.A.R.E. HOLIDAYS

COMBINED REPORT

| EV EN T | TR | STATE | CARE HWY MILES | CARE FTL ACC | CARE FTLS | FTLS WITH SFTY BELT | TOT HWY FTL ACC | ALL HWY FTLS | FTLS WITH SFTY BELT | TOTAL CARE ACC. | ALL DUI | CARE DUI | NMSL 55 CITE | NMSL 65 CITE | TOTAL NMSL CITE | SFTY BELT CITE | SFTY BELT WARN | SFTY BELT TOTAL | CHILD RESTR CITE | O S R |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ** REGION 01 | | | | | | | | | | | | | | | | | | | | |
| * STATE CT | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | CT | 392.0 | 1 | 1 | 0 | 1 | 1 | 0 | 112 | 38 | 13 | 1780 | 0 | 1780 | 31 | 0 | 31 | 0 | Y |
| FO | 93 | CT | 392.0 | 0 | 0 | 0 | 3 | 3 | 0 | 120 | 50 | 7 | 3038 | 0 | 3038 | 242 | 0 | 242 | 0 | Y |
| LA | 93 | CT | 392.0 | 0 | 0 | 0 | 0 | 0 | 0 | 81 | 24 | 6 | 840 | 0 | 840 | 14 | 0 | 14 | 0 | y |
| TH | 93 | CT | 392.0 | 1 | 1 | 0 | 1 | 1 | 0 | 155 | 44 | 7 | 2645 | 0 | 2645 | 52 | 0 | 52 | 0 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 1568.0 | 2 | 2 | 0 | 5 | 5 | 0 | 468 | 156 | 33 | 8303 | 0 | 8303 | 339 | 0 | 339 | 0 | |
| * STATE MA | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | MA | 960.0 | 0 | 0 | 0 | 0 | 0 | 0 | 152 | 118 | 69 | 4928 | 0 | 4928 | 0 | 0 | 0 | 0 | Y |
| FO | 93 | MA | 960.0 | 3 | 6 | 0 | 3 | 6 | 0 | 136 | 130 | 59 | 4878 | 0 | 4878 | 0 | 0 | 0 | 0 | Y |
| LA | 93 | MA | 960.0 | 1 | 1 | 0 | 1 | 1 | 0 | 173 | 120 | 66 | 4014 | 0 | 4014 | 0 | 0 | 0 | 0 | y |
| TH | 93 | MA | 960.0 | 1 | 1 | 0 | 1 | 1 | 0 | 129 | 126 | 85 | 4253 | 0 | 4253 | 0 | 0 | 0 | 0 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 3840.0 | 5 | 8 | 0 | 5 | 8 | 0 | 590 | 494 | 259 | 18073 | 0 | 18073 | 0 | 0 | 0 | 0 | |
| * STATE ME | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | ME | 356.0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 23 | 8 | 61 | 540 | 601 | 1 | 1 | 2 | 12 | Y |
| FO | 93 | ME | 356.0 | 1 | 1 | 1 | 1 | 1 | 1 | 4 | 13 | 2 | 9 | 211 | 220 | 2 | 1 | 3 | 1 | Y |
| LA | 93 | ME | 356.0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 23 | 5 | 93 | 113 | 206 | 5 | 1 | 6 | 2 | y |
| TH | 93 | ME | 356.0 | 0 | 0 | 0 | 1 | 1 | 0 | 21 | 15 | 8 | 97 | 241 | 338 | 14 | 9 | 23 | 5 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 1424.0 | 1 | 1 | 1 | 2 | 2 | 1 | 45 | 74 | 23 | 260 | 1105 | 1365 | 22 | 12 | 33 | 20 | |
| * STATE NH | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | NH | 472.0 | 0 | 0 | 0 | 2 | 2 | 2 | 15 | 24 | 12 | 232 | 663 | 895 | 0 | 0 | 0 | 4 | Y |
| FO | 93 | NH | 472.0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 21 | 15 | 223 | 872 | 1095 | 0 | 0 | 0 | 0 | Y |
| LA | 93 | NH | 472.0 | 0 | 0 | 0 | 2 | 2 | 0 | 9 | 14 | 9 | 332 | 812 | 1144 | 0 | 0 | 0 | 15 | y |
| TH | 93 | NH | 472.0 | 0 | 0 | 0 | 1 | 1 | 0 | 26 | 20 | 13 | 215 | 654 | 869 | 0 | 0 | 0 | 5 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 1888.0 | 0 | 0 | 0 | 5 | 5 | 2 | 62 | 79 | 49 | 1002 | 3001 | 4003 | 0 | 0 | 0 | 24 | |
| * STATE PQ | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | PQ | 0.0 | 0 | 0 | 0 | 6 | 6 | 6 | 6 | 242 | 242 | 0 | 0 | 8476 | 409 | 0 | 409 | 0 | Y |
| FO | 93 | PQ | 45292 | 14 | 16 | 0 | 14 | 16 | 0 | 678 | 117 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Y |
| LA | 93 | PQ | 0.0 | 0 | 0 | 0 | 10 | 12 | 7 | 702 | 290 | 290 | 0 | 0 | 12861 | 488 | 0 | 488 | 0 | y |
| TH | 93 | PQ | 0.0 | 0 | 0 | 0 | 9 | 11 | 5 | 816 | 190 | 190 | 0 | 0 | 4226 | 0 | 270 | 270 | 0 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 45292 | 14 | 16 | 0 | 39 | 45 | 18 | 2202 | 839 | 722 | 0 | 0 | 25563 | 897 | 270 | 1167 | 0 | |

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COMBINED REPORT

| EV EN T | YR | STATE | CARE HWY MILES | CARE FTL ACC | CARE FTLS | FTLS WITH SFTY BELT | TOT HWY FTL ACC | ALL HWY FTLS | FTLS WITH SFTY BELT | TOTAL CARE ACC. | ALL DUI | CARE DUI | NMSL 55 CITE | NMSL 65 CITE | TOTAL NMSL CITE | SFTY BELT CITE | SFTY BELT WARN | SFTY BELT TOTAL | CHILD RESTR CITE | D S R |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| * STATE RI | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | RI | 95.0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 5 | 2 | 517 | 0 | 517 | 0 | 0 | 0 | 4 | Y |
| FO | 93 | RI | 109.0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 3 | 1 | 321 | 0 | 321 | 0 | 0 | 0 | 1 | Y |
| LA | 93 | RI | 109.0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 4 | 1 | 373 | 0 | 373 | 0 | 0 | 0 | 3 | y |
| TH | 93 | RI | 109.0 | 0 | 0 | 0 | 1 | 1 | 0 | 19 | 1 | 0 | 232 | 0 | 232 | 0 | 0 | 0 | 2 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 432.0 | 0 | 0 | 0 | 1 | 1 | 0 | 78 | 13 | 4 | 1443 | 0 | 1443 | 0 | 0 | 0 | 10 | |
| * STATE VT | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | VT | 321.0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 31 | 3 | 116 | 206 | 322 | 0 | 0 | 0 | 7 | Y |
| FO | 93 | VT | 321.0 | 0 | 0 | 0 | 1 | 1 | 0 | 10 | 27 | 1 | 23 | 348 | 371 | 0 | 0 | 0 | 4 | Y |
| LA | 93 | VT | 321.0 | 0 | 0 | 0 | 2 | 2 | 0 | 17 | 26 | 4 | 53 | 253 | 306 | 0 | 140 | 140 | 9 | y |
| TH | 93 | VT | 321.0 | 1 | 1 | 0 | 2 | 2 | 0 | 12 | 12 | 2 | 31 | 193 | 224 | 0 | 0 | 0 | 6 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 1284.0 | 1 | 1 | 0 | 5 | 5 | 0 | 72 | 96 | 10 | 223 | 1000 | 1223 | 0 | 140 | 140 | 26 | |
| ** Subtotal ** | | | | | | | | | | | | | | | | | | | | |
| | | | 55718 | 23 | 28 | 1 | 62 | 71 | 21 | 3517 | 1751 | 1100 | 29306 | 5106 | 59973 | 1258 | 422 | 1679 | 80 | |

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COMBINED REPORT

| EV EN T | YR | STATE | CARE HWY MILES | CARE FTL ACC | CARE FTLS | FTLS WITH SFTY BELT | TOT HWY FTL ACC | ALL HWY FTLS | FTLS WITH SFTY BELT | TOTAL CARE ACC. | ALL DUI | CARE DUI | NMSL 55 CITE | NMSL 65 CITE | TOTAL NMSL CITE | SFTY BELT CITE | SFTY BELT WARN | SFTY BELT TOTAL | CHILD RESTR CITE | D S R |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ** REGION 02 | | | | | | | | | | | | | | | | | | | | |
| * STATE NJ | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | NJ | 145.0 | 0 | 0 | 0 | 8 | 13 | 1 | 13 | 129 | 11 | 1304 | 0 | 1304 | 590 | 0 | 590 | 14 | Y |
| FO | 93 | NJ | 145.0 | 0 | 0 | 0 | 4 | 4 | 1 | 25 | 96 | 19 | 1256 | 0 | 1256 | 540 | 0 | 540 | 18 | Y |
| LA | 93 | NJ | 145.0 | 0 | 0 | 0 | 10 | 10 | 0 | 29 | 138 | 8 | 1875 | 0 | 1875 | 312 | 0 | 312 | 12 | y |
| TH | 93 | NJ | 145.0 | 0 | 0 | 0 | 11 | 12 | 0 | 36 | 80 | 14 | 1409 | 0 | 1409 | 634 | 0 | 634 | 6 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 580.0 | 0 | 0 | 0 | 33 | 39 | 2 | 103 | 443 | 52 | 5844 | 0 | 5844 | 2076 | 0 | 2076 | 50 | |
| * STATE NY | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | NY | 800.0 | 0 | 0 | 0 | 1 | 1 | 0 | 143 | 245 | 0 | 5438 | 0 | 5438 | 896 | 0 | 896 | 61 | Y |
| FO | 93 | NY | 800.0 | 0 | 0 | 0 | 2 | 4 | 1 | 121 | 248 | 0 | 5218 | 0 | 5218 | 499 | 0 | 499 | 108 | Y |
| LA | 93 | NY | 800.0 | 0 | 0 | 0 | 2 | 2 | 0 | 118 | 253 | 0 | 4962 | 0 | 4962 | 259 | 0 | 259 | 44 | Y |
| TH | 93 | NY | 800.0 | 1 | 1 | 0 | 8 | 9 | 2 | 207 | 267 | 0 | 5739 | 0 | 5739 | 705 | 0 | 705 | 101 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 3200.0 | 1 | 1 | 0 | 13 | 16 | 3 | 589 | 1013 | 0 | 21357 | 0 | 21357 | 2359 | 0 | 2359 | 314 | |
| ** Subtotal ** | | | | | | | | | | | | | | | | | | | | |
| | | | 3780.0 | 1 | 1 | 0 | 46 | 55 | 5 | 692 | 1456 | 52 | 27201 | 0 | 27201 | 4435 | 0 | 4435 | 364 | |

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COMBINED REPORT

| EV EN T | YR | STATE | CARS HWY MILES | CARS FTL ACC | CARS FTLS | FTLS WITH SFTY BELT | TOT HWY FTL ACC | ALL HWY FTLS | FTLS WITH SFTY BELT | TOTAL CARS ACC. | ALL DUI | CARS DUI | NMSL 55 CITS | NMSL 65 CITS | TOTAL NMSL CITS | SFTY BELT CITS | SFTY BELT WARN | SFTY BELT TOTAL | CHILD RESTR CITS | O & R |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ** REGION 03 | | | | | | | | | | | | | | | | | | | | |
| * STATE DC | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | DC | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 101 | 0 | 0 | 0 | 0 | 137 | 7 | 144 | 22 | Y |
| PO | 93 | DC | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 75 | 0 | 0 | 0 | 0 | 63 | 10 | 73 | 19 | Y |
| LA | 93 | DC | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 65 | 0 | 0 | 0 | 0 | 141 | 46 | 187 | 49 | y |
| TH | 93 | DC | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 0 | 0 | 0 | 0 | 101 | 10 | 111 | 29 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 278 | 0 | 0 | 0 | 0 | 442 | 73 | 515 | 119 | |
| * STATE DE | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | DE | 183.0 | 0 | 0 | 0 | 2 | 2 | 0 | 56 | 45 | 16 | 526 | 0 | 526 | 96 | 0 | 96 | 41 | Y |
| PO | 93 | DE | 183.0 | 0 | 0 | 0 | 0 | 0 | 0 | 44 | 41 | 10 | 486 | 0 | 486 | 40 | 0 | 40 | 7 | Y |
| LA | 93 | DE | 183.0 | 0 | 0 | 0 | 1 | 1 | 1 | 30 | 51 | 10 | 394 | 0 | 394 | 75 | 0 | 75 | 8 | y |
| TH | 93 | DE | 183.0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 33 | 7 | 299 | 0 | 299 | 41 | 0 | 41 | 8 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 732.0 | 0 | 0 | 0 | 3 | 3 | 1 | 173 | 180 | 43 | 1705 | 0 | 1705 | 252 | 0 | 252 | 64 | |
| * STATE MD | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | MD | 1062.0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 163 | 93 | 2791 | 0 | 2791 | 770 | 237 | 1007 | 78 | Y |
| PO | 93 | MD | 1062.0 | 4 | 4 | 0 | 5 | 6 | 0 | 0 | 164 | 84 | 2890 | 0 | 2890 | 680 | 95 | 775 | 58 | Y |
| LA | 93 | MD | 993.0 | 0 | 0 | 0 | 6 | 6 | 3 | 0 | 142 | 72 | 2644 | 0 | 2644 | 615 | 176 | 791 | 33 | y |
| TH | 93 | MD | 1062.0 | 1 | 1 | 0 | 2 | 2 | 1 | 0 | 112 | 60 | 1688 | 0 | 1688 | 421 | 22 | 443 | 22 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 4179.0 | 6 | 6 | 1 | 14 | 15 | 5 | 0 | 581 | 309 | 10013 | 0 | 10013 | 2486 | 530 | 3016 | 191 | |
| * STATE PA | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | PA | 1139.0 | 1 | 2 | 1 | 10 | 11 | 5 | 118 | 183 | 10 | 1956 | 0 | 1956 | 9 | 91 | 100 | 3 | Y |
| PO | 93 | PA | 1139.0 | 1 | 2 | 0 | 14 | 15 | 1 | 86 | 200 | 10 | 1773 | 0 | 1773 | 16 | 55 | 71 | 9 | Y |
| LA | 93 | PA | 1139.0 | 0 | 0 | 0 | 7 | 7 | 0 | 120 | 214 | 12 | 1647 | 0 | 1647 | 2 | 79 | 81 | 11 | y |
| TH | 93 | PA | 1229.0 | 0 | 0 | 0 | 4 | 4 | 0 | 178 | 197 | 10 | 3461 | 0 | 3461 | 119 | 504 | 623 | 40 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 4646.0 | 2 | 4 | 1 | 35 | 37 | 6 | 502 | 794 | 42 | 8837 | 0 | 8837 | 146 | 729 | 875 | 63 | |
| * STATE VA | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | VA | 1089.0 | 1 | 1 | 0 | 11 | 11 | 2 | 279 | 90 | 15 | 1679 | 1975 | 3654 | 1160 | 623 | 1783 | 132 | Y |
| PO | 93 | VA | 1089.0 | 1 | 3 | 0 | 2 | 7 | 4 | 294 | 145 | 0 | 1672 | 1467 | 3139 | 842 | 0 | 842 | 90 | Y |
| LA | 93 | VA | 1089.0 | 3 | 3 | 0 | 8 | 8 | 2 | 352 | 153 | 89 | 1834 | 1714 | 3548 | 793 | 0 | 793 | 81 | y |
| TH | 93 | VA | 1089.0 | 2 | 2 | 0 | 15 | 16 | 7 | 441 | 137 | 69 | 2274 | 1704 | 3978 | 806 | 0 | 806 | 116 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 4356.0 | 7 | 9 | 0 | 36 | 42 | 15 | 1366 | 525 | 173 | 7459 | 6860 | 14319 | 3601 | 623 | 4224 | 419 | |

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| EVENT | YR | STATE | CARE HWY MILES | CARE FTL ACC | CARE FTLS | FTLS WITH SFTY BELT | TOT HWY FTL ACC | ALL HWY FTLS | FTLS WITH SFTY BELT | TOTAL CARE ACC. | ALL DUI | CARE DUI | NMSL 55 CITE | NMSL 65 CITE | TOTAL NMSL CITE | SFTY BELT CITE | SFTY BELT WARN | SFTY BELT TOTAL | CHILD RESTR CITE | DGR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| * STATE WV | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | WV | 519.0 | 0 | 0 | 0 | 4 | 7 | 1 | 12 | 79 | 11 | 1314 | 1368 | 2682 | 0 | 0 | 0 | 28 | Y |
| FO | 93 | WV | 519.0 | 1 | 1 | 0 | 5 | 8 | 0 | 15 | 94 | 5 | 815 | 945 | 1760 | 0 | 0 | 0 | 27 | Y |
| LA | 93 | WV | 519.0 | 0 | 0 | 0 | 6 | 6 | 2 | 5 | 85 | 11 | 865 | 722 | 1587 | 24 | 687 | 711 | 45 | y |
| TH | 93 | WV | 519.0 | 0 | 0 | 0 | 3 | 3 | 0 | 29 | 31 | 6 | 776 | 567 | 1343 | 24 | 440 | 464 | 8 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 2076.0 | 1 | 1 | 0 | 18 | 24 | 3 | 61 | 289 | 33 | 3770 | 3602 | 7372 | 48 | 1127 | 1175 | 108 | |
| ** Subtotal ** | | | | | | | | | | | | | | | | | | | | |
| | | | 15989 | 16 | 20 | 2 | 106 | 121 | 30 | 2002 | 2647 | 600 | 31784 | 10462 | 42246 | 6955 | 3112 | 10067 | 964 | |

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COMBINED REPORT

| EV EN T | TR | STATE | CARE HWY MILES | CARE FTL ACC | CARE FTLS | FTLS WITH SFTY BELT | TOT HWY FTL ACC | ALL HWY FTLS | FTLS WITH SFTY BELT | TOTAL CARE ACC. | ALL DUI | CARE DUI | NMSL 55 CITE | NMSL 65 CITE | TOTAL NMSL CITE | SFTY BELT CITE | SFTY BELT WARN | SFTY BELT TOTAL | CHILD RESTR CITE | D S R |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ** REGION 04 | | | | | | | | | | | | | | | | | | | | |
| * STATE AL | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | AL | 750.0 | 0 | 0 | 0 | 4 | 4 | 3 | 31 | 167 | 34 | 1695 | 788 | 2483 | 39 | 355 | 394 | 30 | Y |
| PO | 93 | AL | 750.0 | 2 | 2 | 1 | 8 | 15 | 4 | 25 | 144 | 41 | 2055 | 691 | 2746 | 44 | 209 | 253 | 20 | Y |
| LA | 93 | AL | 750.0 | 1 | 2 | 1 | 6 | 8 | 1 | 38 | 146 | 25 | 1925 | 487 | 2412 | 33 | 240 | 273 | 17 | y |
| TH | 93 | AL | 750.0 | 3 | 3 | 3 | 10 | 11 | 3 | 43 | 89 | 6 | 1407 | 484 | 1891 | 13 | 132 | 145 | 8 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 3000.0 | 6 | 7 | 5 | 28 | 38 | 11 | 136 | 546 | 106 | 7082 | 2450 | 9532 | 129 | 936 | 1065 | 75 | |
| * STATE FL | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | FL | 1200.0 | 2 | 2 | 0 | 17 | 19 | 2 | 125 | 129 | 9 | 2560 | 1103 | 3663 | 784 | 299 | 1083 | 49 | Y |
| PO | 93 | FL | 1200.0 | 4 | 4 | 0 | 20 | 20 | 5 | 149 | 160 | 42 | 3094 | 1586 | 4680 | 1676 | 2675 | 4351 | 116 | Y |
| LA | 93 | FL | 1200.0 | 6 | 6 | 0 | 17 | 26 | 3 | 106 | 189 | 61 | 3280 | 1796 | 5076 | 1697 | 2273 | 3970 | 82 | y |
| TH | 93 | FL | 1200.0 | 3 | 4 | 1 | 24 | 30 | 14 | 147 | 158 | 31 | 2387 | 1417 | 3804 | 573 | 308 | 881 | 42 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 4800.0 | 13 | 16 | 1 | 78 | 95 | 24 | 527 | 636 | 143 | 11321 | 5902 | 17223 | 4730 | 5555 | 10285 | 289 | |
| * STATE GA | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | GA | 2488.0 | 1 | 1 | 0 | 7 | 16 | 0 | 54 | 561 | 93 | 1863 | 3293 | 5156 | 353 | 1930 | 2283 | 133 | Y |
| PO | 93 | GA | 2488.0 | 2 | 2 | 2 | 7 | 7 | 1 | 36 | 497 | 123 | 2722 | 3678 | 6400 | 434 | 2479 | 2913 | 226 | Y |
| LA | 93 | GA | 2488.0 | 0 | 0 | 0 | 16 | 18 | 0 | 37 | 568 | 67 | 2894 | 3332 | 6226 | 406 | 3393 | 3799 | 224 | y |
| TH | 93 | GA | 2488.0 | 1 | 1 | 0 | 27 | 27 | 0 | 54 | 476 | 46 | 2074 | 3309 | 5383 | 316 | 1788 | 2104 | 129 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 9952.0 | 4 | 4 | 2 | 57 | 68 | 1 | 181 | 2102 | 329 | 9553 | 13612 | 23165 | 1509 | 9590 | 11099 | 712 | |
| * STATE KY | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | KY | 1389.0 | 0 | 0 | 0 | 13 | 18 | 0 | 0 | 280 | 0 | 1600 | 1013 | 2613 | 0 | 11 | 11 | 76 | Y |
| PO | 93 | KY | 1389.0 | 0 | 0 | 0 | 3 | 4 | 0 | 14 | 269 | 20 | 1343 | 799 | 2142 | 0 | 0 | 0 | 66 | Y |
| LA | 93 | KY | 1389.0 | 3 | 3 | 0 | 9 | 10 | 2 | 18 | 246 | 24 | 1276 | 1190 | 2466 | 0 | 0 | 0 | 93 | y |
| TH | 93 | KY | 1389.0 | 1 | 1 | 0 | 5 | 5 | 2 | 42 | 185 | 23 | 1024 | 806 | 1830 | 0 | 1 | 1 | 48 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 5556.0 | 4 | 4 | 0 | 30 | 37 | 4 | 74 | 980 | 67 | 5243 | 3808 | 9051 | 0 | 12 | 12 | 283 | |
| * STATE MS | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | MS | 2637.0 | 3 | 4 | 1 | 6 | 7 | 1 | 51 | 101 | 40 | 2389 | 626 | 3015 | 78 | 662 | 740 | 23 | Y |
| PO | 93 | MS | 2637.0 | 2 | 2 | 0 | 9 | 10 | 0 | 0 | 197 | 73 | 2765 | 555 | 3320 | 0 | 63 | 63 | 4 | Y |
| LA | 93 | MS | 2637.0 | 3 | 3 | 0 | 9 | 12 | 0 | 98 | 100 | 57 | 2340 | 484 | 2824 | 0 | 1087 | 1087 | 63 | y |
| TH | 93 | MS | 2637.0 | 6 | 6 | 0 | 11 | 11 | 0 | 0 | 106 | 35 | 3452 | 987 | 4439 | 31 | 0 | 31 | 4 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 10548 | 14 | 15 | 1 | 35 | 40 | 1 | 149 | 504 | 205 | 10946 | 2652 | 13598 | 109 | 1812 | 1921 | 94 | |

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1993 C.A.R.E. HOLIDAYS
COMBINED REPORT

| EV EN T | YR | STATE | CARE HWY MILES | CARE FTL ACC | CARE FTLS | FTLS WITH SPTY BELT | TOT HWY FTL ACC | ALL HWY FTLS | FTLS WITH SPTY BELT | TOTAL CARE ACC. | ALL DUI | CARE DUI | NMSL 55 CITE | NMSL 65 CITE | TOTAL NMSL CITE | SPTY BELT CITE | SPTY BELT WARN | SPTY BELT TOTAL | CHILD RESTR CITE | D S R |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| * STATE NC | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | NC | 3644.0 | 0 | 0 | 0 | 18 | 20 | 4 | 153 | 939 | 234 | 4152 | 1359 | 5511 | 3730 | 0 | 3730 | 339 | Y |
| PO | 93 | NC | 3646.0 | 6 | 6 | 3 | 17 | 18 | 3 | 169 | 1103 | 243 | 4662 | 1568 | 6210 | 2805 | 0 | 2805 | 295 | Y |
| LA | 93 | NC | 3647.0 | 1 | 2 | 1 | 8 | 9 | 2 | 0 | 784 | 0 | 3782 | 1312 | 5204 | 2068 | 0 | 2068 | 187 | y |
| TE | 93 | NC | 3569.0 | 5 | 12 | 1 | 12 | 20 | 5 | 0 | 930 | 0 | 5288 | 1877 | 7165 | 1664 | 0 | 1664 | 142 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 14506 | 12 | 20 | 5 | 55 | 67 | 14 | 322 | 3756 | 477 | 17886 | 6096 | 24090 | 10267 | 0 | 10267 | 963 | |
| * STATE SC | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | SC | 1097.0 | 5 | 6 | 1 | 12 | 15 | 1 | 264 | 326 | 94 | 5552 | 2030 | 7582 | 2109 | 968 | 3077 | 466 | Y |
| PO | 93 | SC | 1097.0 | 0 | 0 | 0 | 6 | 4 | 0 | 46 | 354 | 27 | 5642 | 1748 | 7390 | 2656 | 521 | 2975 | 492 | Y |
| LA | 93 | SC | 1097.0 | 1 | 1 | 0 | 7 | 7 | 0 | 56 | 290 | 26 | 4426 | 1920 | 6366 | 2743 | 713 | 3456 | 539 | y |
| TH | 93 | SC | 1097.0 | 1 | 1 | 0 | 10 | 10 | 2 | 105 | 288 | 19 | 6321 | 1732 | 8053 | 1249 | 640 | 1889 | 316 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 4388.0 | 7 | 8 | 1 | 35 | 36 | 3 | 471 | 1258 | 166 | 19941 | 7430 | 27371 | 8555 | 2842 | 11397 | 1813 | |
| * STATE TN | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | TN | 2124.0 | 2 | 2 | 0 | 5 | 5 | 1 | 43 | 517 | 108 | 2621 | 1204 | 3825 | 66 | 839 | 885 | 197 | Y |
| PO | 93 | TN | 2124.0 | 2 | 2 | 1 | 7 | 7 | 2 | 43 | 13 | 13 | 2839 | 1414 | 4253 | 33 | 596 | 629 | 128 | Y |
| LA | 93 | TN | 2124.0 | 5 | 5 | 1 | 13 | 13 | 2 | 48 | 85 | 31 | 3081 | 1785 | 4866 | 36 | 705 | 739 | 188 | y |
| TH | 93 | TN | 2124.0 | 0 | 0 | 0 | 8 | 10 | 2 | 27 | 600 | 16 | 3979 | 2014 | 5993 | 42 | 696 | 738 | 93 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 8496.0 | 9 | 9 | 2 | 33 | 35 | 7 | 161 | 1215 | 168 | 12520 | 6417 | 18937 | 155 | 2836 | 2991 | 606 | |
| ** Subtotal ** | | | | | | | | | | | | | | | | | | | | |
| | | | 51046 | 69 | 83 | 17 | 349 | 416 | 63 | 2021 | 10987 | 1661 | 94490 | 48367 | 162867 | 25454 | 23583 | 69037 | 4835 | |

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OPERATION C.A.R.E.

1993 C.A.R.E. HOLIDAYS

COMBINED REPORT

| EV EN T | YR | STATE | CARE HWY MILES | CARE FTL ACC | CARE FTLS | FTLS WITH SFTY BELT | TOT HWY FTL ACC | ALL HWY FTLS | FTLS WITH SFTY BELT | TOTAL CARE ACC. | ALL DUI | CARE DUI | NMSL 55 CITE | NMSL 65 CITE | TOTAL NMSL CITE | SFTY BELT CITE | SFTY BELT WARN | SFTY BELT TOTAL | CHILD RESTR CITE | D S R |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ** REGION 05 | | | | | | | | | | | | | | | | | | | | |
| * STATE CN | | | | | | | | | | | | | | | | | | | | |
| LA | 93 | CN | 0.0 | 0 | 0 | 0 | 19 | 19 | 0 | 0 | 254 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 0.0 | 0 | 0 | 0 | 19 | 19 | 0 | 0 | 254 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| * STATE IL | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | IL | 3238.0 | 5 | 7 | 6 | 9 | 11 | 2 | 0 | 151 | 68 | 1460 | 760 | 2220 | 879 | 994 | 1873 | 69 | Y |
| FO | 93 | IL | 1322.5 | 4 | 5 | 2 | 10 | 12 | 2 | 290 | 91 | 16 | 1443 | 1049 | 2492 | 615 | 789 | 1404 | 112 | Y |
| LA | 93 | IL | 1322.5 | 4 | 5 | 0 | 10 | 20 | 4 | 237 | 148 | 24 | 1610 | 99 | 1709 | 1005 | 1506 | 2511 | 129 | Y |
| TH | 93 | IL | 1322.5 | 7 | 8 | 4 | 10 | 12 | 4 | 418 | 73 | 12 | 1471 | 1072 | 2543 | 705 | 667 | 1372 | 44 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 7205.5 | 20 | 25 | 12 | 39 | 55 | 12 | 945 | 463 | 120 | 5984 | 2980 | 8964 | 3204 | 3956 | 7160 | 354 | |
| * STATE IN | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | IN | 2300.0 | 1 | 1 | 0 | 4 | 4 | 1 | 147 | 120 | 61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Y |
| FO | 93 | IN | 2300.0 | 0 | 0 | 0 | 3 | 4 | 0 | 31 | 53 | 7 | 1391 | 892 | 2283 | 422 | 304 | 726 | 25 | Y |
| LA | 93 | IN | 2300.0 | 0 | 0 | 0 | 1 | 1 | 0 | 24 | 88 | 12 | 1832 | 1266 | 3098 | 457 | 379 | 836 | 27 | Y |
| TH | 93 | IN | 2300.0 | 0 | 0 | 0 | 2 | 3 | 0 | 67 | 105 | 10 | 2086 | 1239 | 3325 | 581 | 275 | 856 | 39 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 9200.0 | 1 | 1 | 0 | 10 | 12 | 1 | 269 | 366 | 90 | 5309 | 3397 | 8706 | 1460 | 958 | 2418 | 91 | |
| * STATE MI | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | MI | 2500.0 | 6 | 6 | 4 | 15 | 20 | 4 | 0 | 101 | 0 | 815 | 320 | 1135 | 485 | 290 | 775 | 21 | Y |
| FO | 93 | MI | 2500.0 | 3 | 4 | 0 | 11 | 12 | 2 | 0 | 208 | 0 | 1976 | 776 | 2750 | 1321 | 808 | 2129 | 58 | Y |
| LA | 93 | MI | 2500.0 | 1 | 1 | 1 | 7 | 7 | 1 | 0 | 155 | 0 | 2072 | 814 | 2886 | 1593 | 860 | 2453 | 73 | Y |
| TH | 93 | MI | 2500.0 | 6 | 10 | 3 | 16 | 22 | 5 | 0 | 99 | 0 | 979 | 385 | 1363 | 599 | 461 | 1060 | 28 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 10000 | 16 | 21 | 8 | 49 | 61 | 12 | 0 | 563 | 0 | 5840 | 2295 | 8134 | 3998 | 2419 | 6417 | 180 | |
| * STATE MN | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | MN | 980.0 | 1 | 1 | 0 | 3 | 3 | 0 | 133 | 59 | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Y |
| FO | 93 | MN | 980.0 | 3 | 3 | 0 | 7 | 9 | 2 | 101 | 70 | 28 | 1804 | 205 | 2009 | 507 | 633 | 1140 | 20 | Y |
| LA | 93 | MN | 980.0 | 1 | 1 | 0 | 2 | 3 | 0 | 85 | 54 | 21 | 2222 | 294 | 2516 | 533 | 844 | 1377 | 30 | Y |
| TH | 93 | MN | 980.0 | 1 | 1 | 1 | 6 | 6 | 9 | 174 | 59 | 22 | 791 | 100 | 891 | 304 | 469 | 713 | 4 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 3920.0 | 6 | 6 | 1 | 18 | 21 | 11 | 493 | 242 | 108 | 4817 | 599 | 5416 | 1344 | 1946 | 3230 | 54 | |
| * STATE OH | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | OH | 1535.0 | 1 | 2 | 0 | 18 | 22 | 6 | 104 | 665 | 77 | 10211 | 3981 | 14192 | 7511 | 509 | 8020 | 195 | Y |
| FO | 93 | OH | 1535.0 | 1 | 1 | 0 | 17 | 18 | 0 | 97 | 604 | 84 | 9514 | 3789 | 13303 | 7324 | 600 | 7924 | 198 | Y |
| LA | 93 | OH | 1535.0 | 1 | 2 | 0 | 16 | 20 | 1 | 92 | 562 | 84 | 9600 | 3833 | 13433 | 7167 | 551 | 7718 | 150 | Y |
| TH | 93 | OH | 1535.0 | 2 | 2 | 1 | 8 | 8 | 5 | 231 | 444 | 46 | 5117 | 2286 | 7403 | 4003 | 345 | 4348 | 115 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 6140.0 | 5 | 7 | 1 | 59 | 68 | 12 | 524 | 2275 | 291 | 34442 | 13889 | 48331 | 26005 | 2005 | 28010 | 658 | |

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OPERATION C.A.R.E.
1993 C.A.R.E. HOLIDAYS
COMBINED REPORT

| EV ENT | YR | STATE | CARE HWY MILES | CARE PTL ACC | CARE PTLS | PTLS WITH SPTY BELT | TOT HWY PTL ACC | ALL HWY PTLS | PTLS WITH SPTY BELT | TOTAL CARE ACC. | ALL DUI | CARE DUI | NMSL 55 CITE | NMSL 65 CITE | TOTAL NMSL CITE | SPTY BELT CITE | SPTY BELT WARN | SPTY BELT TOTAL | CHILD RESTR CITE | D S R |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| * STATE ON | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | ON | 0.0 | 11 | 15 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Y |
| FO | 93 | ON | 0.0 | 12 | 13 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Y |
| LA | 93 | ON | 0.0 | 12 | 18 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Y |
| TH | 93 | ON | 0.0 | 6 | 7 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 0.0 | 41 | 53 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| * STATE RC | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | RC | 0.0 | 0 | 0 | 0 | 12 | 15 | 0 | 1186 | 369 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 0.0 | 0 | 0 | 0 | 12 | 15 | 0 | 1186 | 369 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| * STATE WI | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | WI | 1230.0 | 0 | 0 | 0 | 9 | 11 | 10 | 9 | 19 | 10 | 101 | 79 | 180 | 118 | 114 | 232 | 1 | Y |
| FO | 93 | WI | 1230.0 | 3 | 2 | 0 | 4 | 5 | 1 | 25 | 67 | 19 | 960 | 431 | 1391 | 521 | 275 | 796 | 23 | Y |
| LA | 93 | WI | 1230.0 | 0 | 0 | 0 | 9 | 13 | 3 | 25 | 84 | 26 | 1178 | 504 | 1682 | 591 | 263 | 854 | 26 | Y |
| TH | 93 | WI | 1230.0 | 2 | 2 | 0 | 11 | 23 | 2 | 101 | 52 | 28 | 607 | 218 | 825 | 315 | 161 | 476 | 12 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 4920.0 | 4 | 4 | 0 | 33 | 52 | 16 | 160 | 222 | 83 | 2846 | 1232 | 4078 | 1545 | 813 | 2358 | 62 | |
| ** Subtotal ** | | | | | | | | | | | | | | | | | | | | |
| | | | 41386 | 91 | 117 | 41 | 239 | 303 | 64 | 3577 | 4754 | 692 | 59238 | 24392 | 83629 | 37556 | 12097 | 49593 | 1399 | |

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OPERATION C.A.R.B.
1993 C.A.R.B. HOLIDAYS
COMBINED REPORT

| EV EN T | YR | STATE | CARB HWY MILES | CARB FTL ACC | CARB FTLS | FTLS WITH SFTY BELT | TOT HWY FTL ACC | ALL HWY FTLS | FTLS WITH SFTY BELT | TOTAL CARB ACC. | ALL DUI | CARB DUI | NMSL 55 CITE | NMSL 65 CITE | TOTAL NMSL CITE | SFTY BELT CITE | SFTY BELT WARN | SFTY BELT TOTAL | CHILD RESTR CITE | D S R |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ** REGION 06 | | | | | | | | | | | | | | | | | | | | |
| * STATE AR | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | AR | 524.0 | 0 | 0 | 0 | 2 | 3 | 0 | 16 | 117 | 12 | 0 | 0 | 1228 | 179 | 375 | 555 | 18 | Y |
| FO | 93 | AR | 524.0 | 1 | 1 | 0 | 6 | 8 | 0 | 19 | 171 | 12 | 805 | 551 | 1356 | 339 | 720 | 1059 | 19 | Y |
| LA | 93 | AR | 524.0 | 0 | 0 | 0 | 2 | 2 | 0 | 39 | 134 | 31 | 866 | 501 | 1367 | 151 | 306 | 457 | 16 | y |
| TH | 93 | AR | 524.0 | 1 | 1 | 1 | 7 | 8 | 2 | 88 | 65 | 29 | 571 | 338 | 909 | 129 | 156 | 285 | 11 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 2096.0 | 2 | 2 | 1 | 17 | 21 | 2 | 162 | 487 | 84 | 2242 | 1390 | 4860 | 798 | 1557 | 2356 | 63 | |
| * STATE LA | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | LA | 840.0 | 0 | 0 | 0 | 8 | 10 | 1 | 0 | 157 | 0 | 0 | 1671 | 1671 | 166 | 0 | 166 | 21 | Y |
| FO | 93 | LA | 840.0 | 1 | 1 | 1 | 7 | 9 | 2 | 0 | 165 | 0 | 2003 | 519 | 2522 | 346 | 96 | 442 | 45 | Y |
| LA | 93 | LA | 840.0 | 0 | 0 | 0 | 9 | 9 | 0 | 0 | 148 | 0 | 2838 | 519 | 3357 | 471 | 204 | 675 | 48 | y |
| TH | 93 | LA | 840.0 | 1 | 1 | 0 | 6 | 6 | 0 | 0 | 155 | 0 | 2172 | 615 | 2787 | 258 | 138 | 396 | 32 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 3360.0 | 2 | 2 | 1 | 30 | 34 | 3 | 0 | 625 | 0 | 7013 | 3324 | 10337 | 1241 | 438 | 1679 | 146 | |
| * STATE NM | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | NM | 2151.0 | 0 | 0 | 0 | 1 | 2 | 0 | 53 | 71 | 58 | 1255 | 792 | 2047 | 513 | 129 | 642 | 39 | Y |
| FO | 93 | NM | 2133.0 | 1 | 3 | 0 | 2 | 4 | 0 | 42 | 68 | 55 | 1777 | 884 | 2881 | 487 | 58 | 545 | 58 | Y |
| LA | 93 | NM | 1670.0 | 3 | 5 | 3 | 3 | 5 | 3 | 65 | 89 | 63 | 1606 | 788 | 2394 | 250 | 61 | 311 | 58 | y |
| TH | 93 | NM | 1670.0 | 3 | 4 | 3 | 4 | 6 | 5 | 36 | 69 | 58 | 2264 | 1499 | 3763 | 453 | 53 | 506 | 73 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 7624.0 | 7 | 12 | 6 | 10 | 17 | 8 | 196 | 297 | 230 | 6902 | 3963 | 11085 | 1703 | 301 | 2004 | 228 | |
| * STATE OK | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | OK | 1155.0 | 0 | 0 | 0 | 4 | 4 | 0 | 0 | 92 | 0 | 2913 | 1675 | 4588 | 286 | 557 | 843 | 12 | Y |
| FO | 93 | OK | 1155.0 | 0 | 0 | 0 | 4 | 5 | 1 | 74 | 119 | 37 | 3206 | 1416 | 4622 | 661 | 0 | 661 | 40 | Y |
| LA | 93 | OK | 1155.0 | 2 | 2 | 0 | 5 | 5 | 0 | 0 | 126 | 0 | 1335 | 687 | 2022 | 240 | 475 | 715 | 14 | y |
| TH | 93 | OK | 1155.0 | 2 | 3 | 0 | 7 | 7 | 1 | 0 | 62 | 0 | 3461 | 1360 | 4801 | 237 | 392 | 629 | 9 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 4620.0 | 4 | 5 | 0 | 20 | 21 | 2 | 74 | 399 | 37 | 10895 | 5138 | 16033 | 1424 | 1424 | 2848 | 75 | |
| * STATE TX | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | TX | 3210.0 | 3 | 4 | 3 | 19 | 23 | 9 | 79 | 468 | 68 | 0 | 0 | 8686 | 1837 | 0 | 1837 | 315 | Y |
| FO | 93 | TX | 3210.0 | 6 | 4 | 2 | 19 | 19 | 1 | 92 | 566 | 97 | 0 | 0 | 10408 | 1965 | 1718 | 3683 | 304 | Y |
| LA | 93 | TX | 3210.0 | 5 | 5 | 1 | 18 | 27 | 7 | 104 | 511 | 79 | 0 | 0 | 11588 | 1777 | 1573 | 3350 | 224 | y |
| TH | 93 | TX | 3210.0 | 7 | 11 | 1 | 22 | 32 | 9 | 308 | 362 | 62 | 0 | 0 | 10037 | 1137 | 1034 | 2171 | 153 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 12840 | 19 | 24 | 7 | 78 | 101 | 26 | 583 | 1887 | 306 | 0 | 0 | 40719 | 6716 | 4325 | 11041 | 895 | |
| ** Subtotal ** | | | | | | | | | | | | | | | | | | | | |
| | | | 30540 | 34 | 45 | 15 | 155 | 194 | 41 | 999 | 3895 | 663 | 26992 | 13815 | 83034 | 11882 | 8045 | 19928 | 1406 | |

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OPERATION C.A.R.E.
1993 C.A.R.E. HOLIDAYS
COMBINED REPORT

| EV EN T | YR | STATE | CARE HWY MILES | CARE FTL ACC | CARE FTLS | FTLS WITH SFTY BELT | TOT HWY FTL ACC | ALL HWY FTLS | FTLS WITH SFTY BELT | TOTAL CARE ACC. | ALL DUI | CARE DUI | NMSL 55 CITE | NMSL 65 CITE | TOTAL NMSL CITE | SFTY BELT CITE | SFTY BELT WARN | SFTY BELT TOTAL | CHILD RESTR CITE | D S R |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ** REGION 07 | | | | | | | | | | | | | | | | | | | | |
| * STATE IA | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | IA | 2150.0 | 0 | 0 | 0 | 2 | 2 | 1 | 0 | 61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Y |
| FO | 93 | IA | 1965.0 | 1 | 1 | 0 | 3 | 4 | 1 | 22 | 66 | 13 | 1557 | 432 | 1989 | 893 | 347 | 1190 | 80 | Y |
| LA | 93 | IA | 2021.0 | 2 | 3 | 2 | 3 | 4 | 2 | 25 | 63 | 8 | 2099 | 677 | 2776 | 914 | 380 | 1294 | 63 | y |
| TH | 93 | IA | 2334.0 | 1 | 3 | 2 | 3 | 5 | 2 | 73 | 47 | 10 | 1598 | 272 | 1870 | 825 | 286 | 1111 | 42 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 8470.0 | 4 | 7 | 4 | 11 | 15 | 6 | 120 | 237 | 31 | 5254 | 1381 | 6635 | 2632 | 1013 | 3595 | 185 | |
| * STATE KS | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | KS | 1657.0 | 0 | 0 | 0 | 1 | 1 | 0 | 51 | 40 | 28 | 713 | 761 | 1474 | 177 | 258 | 435 | 45 | Y |
| FO | 93 | KS | 1255.0 | 0 | 0 | 0 | 3 | 5 | 2 | 34 | 34 | 14 | 458 | 460 | 918 | 135 | 115 | 250 | 28 | Y |
| LA | 93 | KS | 1434.0 | 2 | 4 | 0 | 5 | 8 | 0 | 15 | 37 | 10 | 436 | 803 | 1239 | 128 | 135 | 263 | 42 | y |
| TH | 93 | KS | 1418.0 | 0 | 0 | 0 | 5 | 8 | 5 | 108 | 31 | 18 | 635 | 841 | 1276 | 200 | 142 | 342 | 39 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 5764.0 | 2 | 4 | 0 | 14 | 22 | 7 | 208 | 142 | 70 | 2242 | 2665 | 4907 | 640 | 650 | 1290 | 154 | |
| * STATE MO | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | MO | 5176.0 | 6 | 6 | 5 | 9 | 9 | 5 | 0 | 158 | 155 | 2440 | 1214 | 3654 | 1049 | 1260 | 2309 | 39 | Y |
| FO | 93 | MO | 4315.0 | 4 | 4 | 0 | 0 | 9 | 0 | 0 | 128 | 0 | 2639 | 1267 | 3906 | 991 | 1164 | 2155 | 70 | Y |
| LA | 93 | MO | 4678.0 | 6 | 9 | 1 | 8 | 11 | 2 | 151 | 176 | 80 | 3279 | 1532 | 4811 | 1117 | 1620 | 2737 | 41 | y |
| TH | 93 | MO | 4670.0 | 5 | 6 | 2 | 8 | 9 | 2 | 369 | 114 | 61 | 2191 | 817 | 3008 | 588 | 1026 | 1614 | 20 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 18839 | 21 | 25 | 8 | 25 | 38 | 9 | 520 | 576 | 296 | 10549 | 4830 | 15379 | 3745 | 5070 | 8815 | 170 | |
| * STATE NE | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | NE | 1200.0 | 0 | 0 | 0 | 1 | 1 | 0 | 3 | 43 | 26 | 1124 | 357 | 1481 | 35 | 427 | 462 | 12 | Y |
| FO | 91 | NE | 1200.0 | 1 | 1 | 0 | 1 | 1 | 0 | 10 | 56 | 13 | 900 | 360 | 1260 | 20 | 184 | 204 | 16 | Y |
| LA | 93 | NE | 1200.0 | 0 | 0 | 0 | 3 | 3 | 0 | 5 | 37 | 17 | 948 | 460 | 1408 | 19 | 161 | 182 | 4 | y |
| TH | 93 | NE | 1200.0 | 0 | 0 | 0 | 1 | 1 | 0 | 24 | 31 | 11 | 559 | 359 | 918 | 10 | 106 | 114 | 5 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 4800.0 | 1 | 1 | 0 | 6 | 6 | 0 | 42 | 167 | 67 | 3531 | 1536 | 5067 | 84 | 878 | 962 | 37 | |
| ** Subtotal ** | | | | | | | | | | | | | | | | | | | | |
| | | | 37873 | 28 | 37 | 12 | 56 | 81 | 22 | 890 | 1122 | 464 | 21576 | 10412 | 31988 | 7101 | 7611 | 14662 | 546 | |

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OPERATION C.A.R.E.
1993 C.A.R.E. HOLIDAYS
COMBINED REPORT

| EV EN T | YE | STATE | CARE HWY MILES | CARE FTL ACC | CARE FTLS | FTLS WITH SFTY BELT | TOT HWY FTL ACC | ALL HWY FTLS | FTLS WITH SFTY BELT | TOTAL CARE ACC. | ALL DUI | CARE DUI | NMSL 55 CITE | NMSL 65 CITE | TOTAL NMSL CITE | SFTY BELT CITE | SFTY BELT WARN | SFTY BELT TOTAL | CHILD RESTR CITE | D S R |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ** REGION 08 | | | | | | | | | | | | | | | | | | | | |
| * STATE CO | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | CO | 970.0 | 0 | 0 | 0 | 3 | 3 | 0 | 28 | 149 | 31 | 915 | 966 | 1881 | 462 | 164 | 626 | 22 | Y |
| FO | 93 | CO | 975.0 | 3 | 3 | 2 | 4 | 4 | 2 | 50 | 143 | 31 | 876 | 671 | 1547 | 399 | 141 | 540 | 28 | Y |
| LA | 93 | CO | 975.0 | 5 | 5 | 1 | 11 | 11 | 1 | 50 | 176 | 25 | 873 | 782 | 1655 | 445 | 170 | 615 | 15 | y |
| TH | 93 | CO | 901.0 | 2 | 2 | 0 | 2 | 2 | 0 | 0 | 65 | 0 | 471 | 427 | 898 | 254 | 91 | 345 | 15 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 3821.0 | 10 | 10 | 3 | 20 | 20 | 3 | 128 | 533 | 87 | 3135 | 2846 | 5981 | 1560 | 566 | 2126 | 80 | |
| * STATE MT | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | MT | 1435.0 | 0 | 0 | 0 | 1 | 1 | 0 | 17 | 29 | 16 | 844 | 390 | 1234 | 342 | 182 | 526 | 7 | Y |
| FO | 93 | MT | 1435.0 | 0 | 0 | 0 | 3 | 6 | 1 | 31 | 42 | 13 | 599 | 311 | 910 | 144 | 150 | 294 | 4 | Y |
| LA | 93 | MT | 1435.0 | 1 | 1 | 0 | 3 | 6 | 2 | 24 | 35 | 15 | 766 | 510 | 1276 | 226 | 188 | 414 | 1 | y |
| TH | 93 | MT | 1435.0 | 1 | 1 | 1 | 3 | 4 | 1 | 40 | 22 | 11 | 320 | 252 | 572 | 105 | 75 | 180 | 0 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 5760.0 | 2 | 2 | 1 | 10 | 15 | 4 | 112 | 128 | 55 | 2529 | 1483 | 4012 | 817 | 595 | 1412 | 12 | |
| * STATE ND | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | ND | 1164.0 | 0 | 0 | 0 | 1 | 1 | 0 | 13 | 23 | 8 | 830 | 138 | 968 | 0 | 0 | 0 | 51 | Y |
| FO | 93 | ND | 1164.0 | 0 | 0 | 0 | 1 | 1 | 0 | 9 | 27 | 10 | 815 | 157 | 964 | 0 | 0 | 0 | 25 | Y |
| LA | 93 | ND | 1164.0 | 0 | 0 | 0 | 1 | 1 | 1 | 9 | 17 | 6 | 1128 | 300 | 1428 | 0 | 0 | 0 | 25 | y |
| TH | 93 | ND | 1164.0 | 0 | 0 | 0 | 0 | 0 | 0 | 57 | 11 | 8 | 333 | 61 | 394 | 0 | 0 | 0 | 5 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 6656.0 | 0 | 0 | 0 | 3 | 3 | 1 | 88 | 78 | 30 | 3106 | 656 | 3754 | 0 | 0 | 0 | 106 | |
| * STATE SD | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | SD | 1553.0 | 1 | 1 | 0 | 3 | 4 | 0 | 16 | 51 | 24 | 439 | 252 | 691 | 0 | 0 | 0 | 14 | Y |
| FO | 93 | SD | 1553.0 | 0 | 0 | 0 | 2 | 2 | 0 | 12 | 73 | 15 | 536 | 113 | 649 | 0 | 0 | 0 | 8 | Y |
| LA | 93 | SD | 1553.0 | 1 | 2 | 0 | 3 | 4 | 0 | 11 | 49 | 22 | 663 | 291 | 954 | 0 | 0 | 0 | 9 | y |
| TH | 93 | SD | 1637.0 | 0 | 0 | 0 | 0 | 0 | 0 | 76 | 24 | 11 | 120 | 67 | 187 | 0 | 0 | 0 | 0 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 6296.0 | 2 | 3 | 0 | 8 | 10 | 0 | 115 | 197 | 74 | 1758 | 723 | 2481 | 0 | 0 | 0 | 31 | |
| * STATE UT | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | UT | 890.0 | 4 | 6 | 0 | 4 | 6 | 0 | 70 | 106 | 56 | 1459 | 722 | 2181 | 633 | 140 | 773 | 84 | Y |
| FO | 93 | UT | 890.0 | 2 | 2 | 1 | 2 | 2 | 1 | 83 | 43 | 40 | 1007 | 513 | 1520 | 270 | 51 | 321 | 19 | Y |
| LA | 93 | UT | 890.0 | 2 | 2 | 1 | 2 | 2 | 1 | 79 | 76 | 45 | 1053 | 548 | 1601 | 347 | 76 | 423 | 69 | y |
| TH | 93 | UT | 890.0 | 1 | 5 | 0 | 1 | 5 | 0 | 85 | 44 | 39 | 922 | 570 | 1492 | 259 | 77 | 336 | 33 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 3560.0 | 9 | 15 | 2 | 9 | 15 | 2 | 317 | 269 | 180 | 4441 | 2353 | 6794 | 1509 | 344 | 1853 | 205 | |

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OPERATION C.A.R.S.
1993 C.A.R.S. HOLIDAYS
COMBINED REPORT

| EV YR STATE EN T | CARS HWY MILES | CARS FTL ACC | CARS FTLS | FTLS WITH SFTY BELT | TOT HWY FTL ACC | ALL HWY FTLS | FTLS WITH SFTY BELT | TOTAL CARS ACC. | ALL DUI | CARS DUI | NMSL 55 CITE | NMSL 65 CITE | TOTAL NMSL CITE | SFTY BELT CITE | SFTY BELT WARN | SFTY BELT TOTAL | CHILD RESTR CITE | D S R |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| * STATE WY | | | | | | | | | | | | | | | | | | |
| ME 93 WY | 300.0 | 0 | 0 | 0 | 1 | 1 | 0 | 6 | 22 | 5 | 748 | 534 | 1282 | 0 | 175 | 175 | 4 | Y |
| PO 93 WY | 207.0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 34 | 0 | 767 | 424 | 1191 | 0 | 50 | 50 | 6 | Y |
| LA 93 WY | 210.0 | 0 | 0 | 0 | 3 | 4 | 0 | 3 | 19 | 0 | 842 | 529 | 1371 | 0 | 78 | 78 | 3 | y |
| TE 93 WY | 403.0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 18 | 11 | 399 | 356 | 755 | 0 | 0 | 0 | 4 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | |
| | 1120.0 | 0 | 0 | 0 | 4 | 5 | 0 | 16 | 93 | 16 | 2756 | 1843 | 4599 | 0 | 303 | 303 | 16 | |
| ** Subtotal ** | | | | | | | | | | | | | | | | | | |
| | 25193 | 23 | 30 | 6 | 54 | 68 | 10 | 776 | 1298 | 442 | 17725 | 9904 | 27629 | 3886 | 1808 | 5694 | 450 | |

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OPERATION C.A.R.E.
1993 C.A.R.E. HOLIDAYS
COMBINED REPORT

| EV EN T | YR | STATE | CARE HWY MILES | CARE FTL ACC | CARE FTLS | FTLS WITH SFTY BELT | TOT HWY FTL ACC | ALL HWY FTLS | FTLS WITH SFTY BELT | TOTAL CARE ACC. | ALL DUI | CARE DUI | NMSL 55 CITE | NMSL 65 CITE | TOTAL NMSL CITE | SFTY BELT CITE | SFTY BELT WARN | SFTY BELT TOTAL | CHILD RESTR CITE | D S R |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ** REGION 09 | | | | | | | | | | | | | | | | | | | | |
| * STATE AZ | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | AZ | 1173.7 | 4 | 6 | 3 | 4 | 6 | 1 | 74 | 143 | 91 | 1672 | 919 | 2591 | 409 | 256 | 665 | 41 | Y |
| FO | 93 | AZ | 1173.7 | 12 | 13 | 4 | 13 | 17 | 5 | 81 | 128 | 74 | 1266 | 692 | 1958 | 319 | 192 | 511 | 34 | y |
| LA | 93 | AZ | 1173.7 | 0 | 0 | 0 | 1 | 1 | 0 | 99 | 230 | 119 | 2217 | 1162 | 3379 | 480 | 220 | 700 | 68 | y |
| TH | 93 | AZ | 1173.7 | 2 | 2 | 1 | 3 | 3 | 2 | 100 | 102 | 68 | 1585 | 1050 | 2635 | 360 | 191 | 551 | 54 | y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 4694.8 | 18 | 21 | 8 | 21 | 27 | 10 | 354 | 603 | 352 | 6740 | 3823 | 10563 | 1568 | 859 | 2427 | 197 | |
| * STATE CA | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | CA | 1080.0 | 2 | 3 | 0 | 16 | 29 | 2 | 69 | 1927 | 63 | 11361 | 1218 | 12579 | 12639 | 0 | 12639 | 307 | Y |
| FO | 93 | CA | 1080.0 | 2 | 3 | 1 | 51 | 54 | 11 | 97 | 2006 | 52 | 12179 | 1082 | 13261 | 6792 | 0 | 6792 | 304 | Y |
| LA | 93 | CA | 1080.0 | 3 | 3 | 0 | 43 | 49 | 8 | 94 | 2070 | 66 | 11776 | 1146 | 12922 | 5898 | 0 | 5898 | 290 | Y |
| TH | 93 | CA | 1080.0 | 1 | 1 | 1 | 21 | 24 | 12 | 139 | 1761 | 61 | 13368 | 1388 | 14756 | 5041 | 0 | 5041 | 198 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 4320.0 | 8 | 10 | 2 | 131 | 156 | 33 | 399 | 7764 | 242 | 48684 | 4834 | 53518 | 30370 | 0 | 30370 | 1099 | |
| * STATE GM | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | GM | 23.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N |
| FO | 93 | GM | 28.5 | 0 | 0 | 0 | 0 | 0 | 0 | 52 | 7 | 4 | 105 | 57 | 162 | 54 | 23 | 77 | 36 | Y |
| LA | 93 | GM | 23.0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 15 | 10 | 34 | 29 | 63 | 19 | 32 | 51 | 18 | Y |
| TH | 93 | GM | 23.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 97.5 | 0 | 0 | 0 | 0 | 0 | 0 | 81 | 22 | 14 | 139 | 86 | 225 | 73 | 55 | 128 | 54 | |
| * STATE HW | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | HW | 944.0 | 2 | 3 | 0 | 2 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Y |
| FO | 93 | HW | 944.0 | 2 | 3 | 0 | 2 | 3 | 0 | 111 | 64 | 20 | 196 | 0 | 196 | 139 | 165 | 304 | 28 | y |
| LA | 93 | HW | 944.0 | 0 | 0 | 0 | 0 | 0 | 0 | 96 | 48 | 23 | 294 | 0 | 254 | 140 | 198 | 338 | 40 | Y |
| TH | 93 | HW | 944.0 | 1 | 1 | 0 | 1 | 1 | 0 | 129 | 98 | 54 | 142 | 0 | 142 | 151 | 99 | 250 | 42 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 3776.0 | 5 | 7 | 0 | 5 | 7 | 3 | 336 | 210 | 97 | 592 | 0 | 592 | 430 | 462 | 892 | 110 | |
| * STATE NV | | | | | | | | | | | | | | | | | | | | |
| ME | 93 | NV | 864.0 | 1 | 2 | 0 | 2 | 4 | 4 | 22 | 42 | 42 | 894 | 573 | 1427 | 285 | 344 | 629 | 36 | Y |
| FO | 93 | NV | 544.0 | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 78 | 41 | 1655 | 955 | 2610 | 476 | 411 | 887 | 51 | |
| LA | 93 | NV | 544.0 | 0 | 0 | 0 | 0 | 0 | 0 | 39 | 94 | 76 | 1511 | 1174 | 2685 | 344 | 185 | 529 | 51 | Y |
| TH | 93 | NV | 944.0 | 2 | 2 | 1 | 2 | 3 | 1 | 33 | 63 | 27 | 957 | 690 | 1647 | 279 | 145 | 424 | 28 | |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | | | |
| | | | 2496.0 | 5 | 6 | 2 | 6 | 9 | 6 | 96 | 277 | 186 | 4977 | 3392 | 8349 | 1384 | 1085 | 2469 | 166 | |
| ** Subtotal ** | | | | | | | | | | | | | | | | | | | | |
| | | | 15384 | 36 | 44 | 12 | 163 | 199 | 92 | 1266 | 8876 | 891 | 61132 | 12135 | 73267 | 33825 | 2461 | 36286 | 1626 | |

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OPERATION C.A.R.E.
1993 C.A.R.E. HOLIDAYS
COMBINED REPORT

| EV YR STATE EN T | CARE HWY MILES | CARE PTL ACC | CARE FTLS | FTLS WITH SFTY BELT | TOT HWY FTL ACC | ALL HWY FTLS | FTLS WITH SFTY BELT | TOTAL CARE ACC. | ALL DUI | CARE DUI | NMSL 55 CITE | NMSL 65 CITE | TOTAL NMSL CITE | SFTY BELT CITE | SFTY BELT WARN | SFTY BELT TOTAL | CHILD RESTR CITE | O S R |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ** REGION 10 | | | | | | | | | | | | | | | | | | |
| * STATE AK | | | | | | | | | | | | | | | | | | |
| ME 93 AK | 2284.0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 22 | 22 | 335 | 53 | 388 | 110 | 126 | 236 | 7 | Y |
| FO 93 AK | 2284.0 | 2 | 5 | 1 | 2 | 5 | 1 | 26 | 31 | 18 | 567 | 9 | 576 | 27 | 49 | 76 | 12 | Y |
| LA 93 AK | 2284.0 | 1 | 1 | 1 | 1 | 1 | 1 | 11 | 22 | 18 | 667 | 67 | 734 | 88 | 42 | 130 | 24 | y |
| TH 93 AK | 2284.0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 15 | 3 | 115 | 57 | 172 | 22 | 7 | 29 | 2 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | |
| | 9136.0 | 3 | 6 | 2 | 3 | 6 | 3 | 55 | 90 | 61 | 1684 | 186 | 1870 | 267 | 222 | 469 | 45 | |
| * STATE ID | | | | | | | | | | | | | | | | | | |
| ME 93 ID | 883.0 | 1 | 1 | 0 | 2 | 2 | 0 | 10 | 50 | 17 | 799 | 348 | 1147 | 329 | 198 | 527 | 65 | Y |
| FO 93 ID | 883.0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 66 | 18 | 966 | 371 | 1337 | 233 | 81 | 314 | 30 | Y |
| LA 93 ID | 883.0 | 2 | 2 | 1 | 2 | 3 | 1 | 9 | 33 | 15 | 696 | 265 | 961 | 115 | 37 | 152 | 16 | y |
| TH 93 ID | 828.0 | 0 | 0 | 0 | 2 | 3 | 0 | 12 | 28 | 17 | 360 | 214 | 574 | 68 | 30 | 98 | 4 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | |
| | 3477.0 | 3 | 3 | 1 | 6 | 7 | 1 | 51 | 155 | 67 | 2821 | 1198 | 4019 | 745 | 346 | 1091 | 95 | |
| * STATE OR | | | | | | | | | | | | | | | | | | |
| ME 93 OR | 990.0 | 0 | 0 | 0 | 1 | 1 | 0 | 25 | 87 | 24 | 1211 | 381 | 1592 | 718 | 589 | 1307 | 39 | Y |
| FO 93 OR | 990.0 | 0 | 0 | 0 | 6 | 6 | 1 | 16 | 85 | 22 | 1287 | 621 | 1529 | 492 | 445 | 937 | 25 | Y |
| LA 93 OR | 990.0 | 0 | 0 | 0 | 7 | 7 | 1 | 16 | 86 | 23 | 926 | 395 | 1321 | 289 | 250 | 539 | 9 | y |
| TH 93 OR | 990.0 | 1 | 1 | 1 | 5 | 6 | 2 | 85 | 52 | 11 | 853 | 290 | 1143 | 174 | 193 | 367 | 12 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | |
| | 3960.0 | 1 | 1 | 1 | 19 | 20 | 4 | 142 | 308 | 80 | 4277 | 1687 | 5585 | 1673 | 1677 | 3150 | 75 | |
| * STATE WA | | | | | | | | | | | | | | | | | | |
| ME 93 WA | 770.0 | 1 | 3 | 3 | 2 | 5 | 5 | 131 | 303 | 67 | 2927 | 652 | 3579 | 1075 | 859 | 1934 | 102 | Y |
| FO 93 WA | 771.0 | 2 | 3 | 0 | 6 | 7 | 1 | 63 | 304 | 119 | 3335 | 658 | 3993 | 820 | 703 | 1523 | 50 | Y |
| LA 93 WA | 770.0 | 0 | 0 | 0 | 7 | 8 | 1 | 100 | 236 | 87 | 3204 | 732 | 3936 | 863 | 730 | 1593 | 51 | y |
| TH 93 WA | 771.0 | 5 | 5 | 0 | 5 | 8 | 0 | 277 | 229 | 107 | 2643 | 534 | 3177 | 904 | 672 | 1576 | 52 | Y |
| * Subsubtotal * | | | | | | | | | | | | | | | | | | |
| | 3082.0 | 8 | 11 | 3 | 20 | 28 | 7 | 571 | 1072 | 380 | 12109 | 2576 | 14685 | 3662 | 2963 | 6625 | 255 | |
| ** Subtotal ** | | | | | | | | | | | | | | | | | | |
| | 19655 | 15 | 21 | 7 | 48 | 61 | 14 | 819 | 1625 | 588 | 20891 | 5447 | 26159 | 6327 | 5008 | 11335 | 470 | |
| *** Total *** | | | | | | | | | | | | | | | | | | |
| | 306564 | 336 | 426 | 113 | 1278 | 1569 | 324 | 16555 | 38221 | 7195 | 390293 | 160040 | 598085 | 138679 | 64167 | 202716 | 12140 | |

## SAFETY BELT TICKETS AND VIOLATIONS BY VMT

Mr. CARR. Please update the data from belt use law states on safety belt tickets and citations by vehicle miles traveled, as shown on page 414 of last year's hearing record.

[The information follows:]

Since we are using performance measures to determine state progress in meeting belt use goals, the states have the flexibility to determine which strategies they will use to achieve their goal. As part of the national campaign to achieve the Secretary's safety belt and alcohol goals for 1997, NHTSA will be asking states to provide some local enforcement information, such as the number of jurisdictions within a state conducting Selective Traffic Enforcement Programs (STEPs). These are highly publicized belt and/or alcohol-impaired driving enforcement efforts.

## STATES WITH MANDATORY HELMET USE LAWS

Mr. CARR. What states have adopted mandatory helmet use laws since 1991?

[The information follows:]

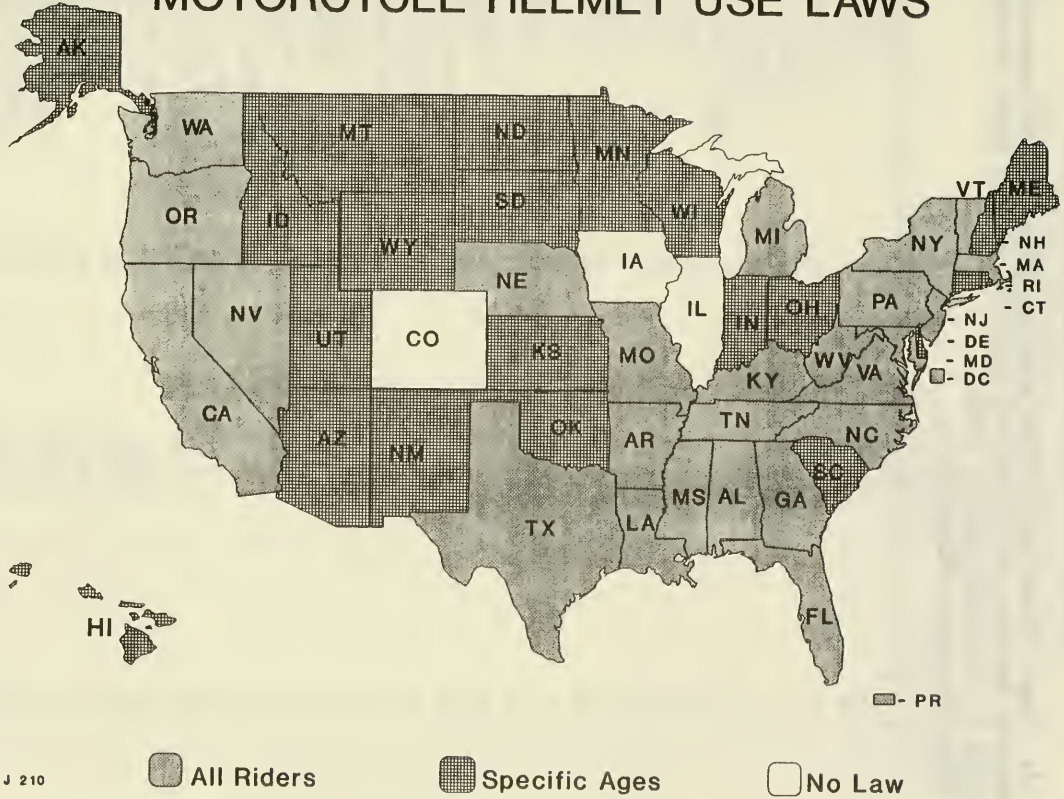
Since 1991, California and Maryland are the only States to have put in effect mandatory helmet use laws for all riders. California's law, passed in 1991, became effective on January 1, 1992; Maryland's law, passed in 1992, become effective on October 1, 1992.

## MOTORCYCLE HELMET USE LAWS BY STATE MAP

Mr. CARR. For the record, please update the U.S. map showing states with and without motorcycle helmet laws, as shown on page 366 of last year's hearing record.

[The information follows:]

# MOTORCYCLE HELMET USE LAWS



## STATE-BY-STATE MOTORCYCLE FATALITIES

Mr. CARR. Please update the state-by-state data on motorcycle occupant fatalities as shown on page 367 of last year's hearing record, by providing data for 1993.

[The information follows:]

# 1992 MOTORCYCLE OCCUPANT FATALITIES BY REGISTERED MOTORCYCLES

| STATE | MOTORCYCLE OCCUPANT FATALITIES | NUMBER OF REGISTERED MOTORCYCLES | FATALITY RATE PER 10,000 REGISTERED MOTORCYCLES |
|---|---|---|---|
| ALABAMA | 34 | 41,358 | 8.2 |
| ALASKA | 7 | 11,191 | 6.3 |
| ARIZONA | 64 | 71,163 | 9.0 |
| ARKANSAS | 22 | 13,905 | 15.8 |
| CALIFORNIA | 325 | 623,046 | 5.2 |
| COLORADO | 41 | 88,872 | 4.6 |
| CONNECTICUT | 38 | 49,667 | 7.7 |
| DELAWARE | 14 | 9,759 | 14.3 |
| DIST OF COLUMBIA | 1 | 1,831 | 5.5 |
| FLORIDA | 176 | 193,739 | 9.1 |
| GEORGIA | 56 | 80,035 | 7.0 |
| HAWAII | 16 | 22,846 | 7.0 |
| IDAHO | 17 | 33,475 | 5.1 |
| ILLINOIS | 104 | 200,904 | 5.2 |
| INDIANA | 69 | 95,195 | 7.2 |
| IOWA | 29 | 157,383 | 1.8 |
| KANSAS | 28 | 55,749 | 5.0 |
| KENTUCKY | 37 | 35,133 | 10.5 |
| LOUISIANA | 36 | 35,193 | 10.2 |
| MAINE | 20 | 30,484 | 6.6 |
| MARYLAND | 56 | 52,162 | 10.7 |
| MASSACHUSETTS | 33 | 62,991 | 5.2 |
| MICHIGAN | 57 | 153,886 | 3.7 |
| MINNESOTA | 28 | 105,916 | 2.6 |
| MISSISSIPPI | 15 | 27,147 | 5.5 |
| MISSOURI | 44 | 60,045 | 7.3 |
| MONTANA | 13 | 22,630 | 5.7 |
| NEBRASKA | 9 | 19,421 | 4.6 |
| NEVADA | 19 | 19,779 | 9.6 |
| NEW HAMPSHIRE | 10 | 34,276 | 2.9 |
| NEW JERSEY | 45 | 100,274 | 4.5 |
| NEW MEXICO | 32 | 31,167 | 10.3 |
| NEW YORK | 119 | 193,715 | 6.1 |
| NORTH CAROLINA | 68 | 58,635 | 11.6 |
| NORTH DAKOTA | 5 | 18,464 | 2.7 |
| OHIO | 112 | 230,291 | 4.9 |
| OKLAHOMA | 30 | 56,937 | 5.3 |
| OREGON | 25 | 62,069 | 4.0 |
| PENNSYLVANIA | 90 | 167,010 | 5.4 |
| RHODE ISLAND | 11 | 21,137 | 5.2 |
| SOUTH CAROLINA | 57 | 32,595 | 17.5 |
| SOUTH DAKOTA | 11 | 23,408 | 4.7 |
| TENNESSEE | 69 | 75,059 | 9.2 |
| TEXAS | 130 | 164,147 | 7.9 |
| UTAH | 17 | 24,174 | 7.0 |
| VERMONT | 6 | 16,588 | 3.6 |
| VIRGINIA | 38 | 59,209 | 6.4 |
| WASHINGTON | 47 | 111,587 | 4.2 |
| WEST VIRGINIA | 19 | 18,251 | 10.4 |
| WISCONSIN | 40 | 175,683 | 2.3 |
| WYOMING | 5 | 15,537 | 3.2 |
| U.S. TOTAL | 2,394 | 4,065,118 | 5.9 |

SOURCE:
FATALITIES: FATAL ACCIDENT REPORTING SYSTEM
REGISTERED VEHICLES: FEDERAL HIGHWAY ADMINISTRATION

## BICYCLIST FATALITIES BY STATE

Mr. CARR. Please update the data on bicyclist fatalities as shown on page 370 of last year's hearing record, by providing data for 1992.

[The information follows:]

The following table updates the chart shown on page 370 of last year's hearing record. Last year's chart covered calendar year 1991; the current update covers 1992. State-level data for 1993 are not yet available.

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# PEDALCYCLIST FATALITIES BY STATE 1992

| STATE | PEDALCYCLIST FATALITIES | RESIDENT POPULATION (THOUSANDS) | FATALITY RATE PER 100,000 POPULATION |
|---|---|---|---|
| ALABAMA | 8 | 4,136 | 0.19 |
| ALASKA | 0 | 587 | 0.00 |
| ARIZONA | 18 | 3,832 | 0.47 |
| ARKANSAS | 4 | 2,399 | 0.17 |
| CALIFORNIA | 112 | 30,867 | 0.36 |
| COLORADO | 13 | 3,470 | 0.37 |
| CONNECTICUT | 4 | 3,281 | 0.12 |
| DELAWARE | 3 | 689 | 0.44 |
| DIST OF COLUMBIA | 3 | 589 | 0.51 |
| FLORIDA | 106 | 13,488 | 0.79 |
| GEORGIA | 20 | 6,751 | 0.30 |
| HAWAII | 2 | 1,160 | 0.17 |
| IDAHO | 1 | 1,067 | 0.09 |
| ILLINOIS | 24 | 11,631 | 0.21 |
| INDIANA | 18 | 5,662 | 0.32 |
| IOWA | 8 | 2,812 | 0.28 |
| KANSAS | 2 | 2,523 | 0.08 |
| KENTUCKY | 8 | 3,755 | 0.21 |
| LOUISIANA | 22 | 4,287 | 0.51 |
| MAINE | 4 | 1,235 | 0.32 |
| MARYLAND | 14 | 4,908 | 0.29 |
| MASSACHUSETTS | 9 | 5,998 | 0.15 |
| MICHIGAN | 34 | 9,437 | 0.36 |
| MINNESOTA | 11 | 4,480 | 0.25 |
| MISSISSIPPI | 9 | 2,614 | 0.34 |
| MISSOURI | 7 | 5,193 | 0.13 |
| MONTANA | 5 | 824 | 0.61 |
| NEBRASKA | 2 | 1,606 | 0.12 |
| NEVADA | 4 | 1,327 | 0.30 |
| NEW HAMPSHIRE | 2 | 1,111 | 0.18 |
| NEW JERSEY | 13 | 7,789 | 0.17 |
| NEW MEXICO | 2 | 1,581 | 0.13 |
| NEW YORK | 48 | 18,119 | 0.26 |
| NORTH CAROLINA | 22 | 6,843 | 0.32 |
| NORTH DAKOTA | 0 | 636 | 0.00 |
| OHIO | 19 | 11,016 | 0.17 |
| OKLAHOMA | 4 | 3,212 | 0.12 |
| OREGON | 6 | 2,977 | 0.20 |
| PENNSYLVANIA | 12 | 12,009 | 0.10 |
| RHODE ISLAND | 1 | 1,005 | 0.10 |
| SOUTH CAROLINA | 19 | 3,603 | 0.53 |
| SOUTH DAKOTA | 1 | 711 | 0.14 |
| TENNESSEE | 6 | 5,024 | 0.12 |
| TEXAS | 48 | 17,656 | 0.27 |
| UTAH | 6 | 1,813 | 0.33 |
| VERMONT | 2 | 570 | 0.35 |
| VIRGINIA | 13 | 6,377 | 0.20 |
| WASHINGTON | 9 | 5,136 | 0.18 |
| WEST VIRGINIA | 0 | 1,812 | 0.00 |
| WISCONSIN | 13 | 5,007 | 0.26 |
| WYOMING | 1 | 466 | 0.21 |
| TOTAL | 722 | 255,082 | 0.28 |

SOURCES: FATALITIES – FATAL ACCIDENT REPORTING SYSTEM (FARS)

POPULATION – BUREAU OF THE CENSUS

NOTE: THE SUM OF INDIVIDUAL STATE RESIDENT POPULATION MAY NOT EQUAL NATIONAL TOTALS BECAUSE NUMBERS HAVE BEEN ROUNDED.

## STATES WITH BACK OF PICKUP TRUCK RESTRICTIONS

Mr. CARR. Please update the listing of those states with restrictions on riding in the back of pickup trucks, including the occupant age to which the law applies, as shown on page 374 of last year's hearing record.

[The information follows:]

The following States plus D.C. and P.R. have enacted laws preventing people from riding in the back of trucks.

California.—Prohibits the transportation of any person in the back of a motor truck with a gross weight of 6,000 pounds or less, commonly known as a pickup truck. (Unless covered or in FMVSS restraints)

Dist. of Col.—Prohibits riding in the back of pickup trucks when the driver's view is obstructed.

Georgia.—Makes it unlawful for any person under the age of 18 to ride in the bed of an uncovered pickup truck.

Hawaii.—Makes it unlawful for persons to ride in the bed of a pickup truck.

Louisiana.—Makes it unlawful for children under six to ride in the bed of an uncovered pickup truck.

Maryland.—Expanded the applicability of mandatory seat belt use to pickup trucks, when there are seating positions with safety belts available in the passenger compartment.

Massachusetts.—Prohibits children under 12 from riding in the bed of a pickup truck.

Ohio.—Makes it unlawful for children under 16 to ride in the back of a pickup truck.

Puerto Rico.—Makes it unlawful for persons to ride outside the passenger cabin of a vehicle.

Rhode Island.—Requires children to be restrained while riding in open trucks.

Texas.—Makes it unlawful for children 12 years and under to ride in the bed of a pickup truck.

## OCCUPANT FATALITIES—BACK OF PICKUP TRUCKS

Mr. CARR. Please provide for the record the data on occupant fatalities in the back of pickup trucks, as shown on page 375 of last year's hearing record, by providing data for 1992.

[The information follows:]

*Occupant fatalities in USA—1992*

| | |
|---|---|
| Occupant fatalities | 32,869 |
| Occupant fatalities in pickup | 5,376 |
| Percent of total occupant fatalities | 16.4 |
| Occupant fatalities in open bed only of pickup | 121 |
| Percent of occupant fatalities in pickup | 2.3 |

## CHILD PASSENGER PROTECTION LAWS

Mr. CARR. For the record, please provide a state-by-state listing of child passenger protection laws, including the effective date, the age at which safety seats/other restraints are required, safety belt substitution criteria, and penalties for noncompliance.

[The information follows:]

## CHILD PASSENGER PROTECTION LAWS

| State | Effective Date | Restraint Age | Safety Seat Age | May Substitute Safety Belt | Penalty* |
|---|---|---|---|---|---|
| Alabama | July 1982 | Under 6 | Under 6 | Either 4 or 5 | $10 |
| aska | June 1985 | Under 16 | Under 4 | 4 thru 15 | $50, 2 points |
| rizona[1] | August 1983 | Thru 4[2] | Thru 4[2] | No | $50 |
| Arkansas | August 1983 | Under 5 | Under 3 | Between 3 & 5 | $10-$25 |
| California | January 1983 | Under 4[2] | Under 4[2] | No | $100 |
| Colorado | January 1984 | Under 4 | Under 4 | No | $59 |
| Connecticut | May 1982 | Under 4 | Under 4 | Between 1 & 4 in rear seat | $25-$100 |
| Delaware | June 1982 | Under 4 | Under 4 | No | $25 |
| Dist. of Columbia | July 1983 | Up to 16 | Under 3 | Between 3 & 6 | $55, 2 points |
| Florida | July 1983 | Under 6 | Under 4 | Between 4 & 6 | $150, 3 points |
| Georgia | July 1984 | Under 16 | Under 4 | Over 4 | $25 |
| Hawaii | July 1983 | Under 4 | Under 3 | Between 3 & 4 | $100 maximum |
| Idaho[1] | January 1985 | Under 4[2] | Under 4[2] | No | $100 maximum |
| Illinois | July 1983 | Under 6 | Under 4 | Between 4 & 6 | $25-$50 |
| Indiana | January 1984 | Under 5 | Under 3 | Between 3 & 5 | $50-$500 |
| Iowa | January 1985 | Under 6 | Under 3 | Between 3 & 6 | $10 |
| Kansas | January 1982 | Under 14 | Under 4 | Between 4 & 13 all seat positions | $20 |
| Kentucky[1] | July 1982 | 40" & Under | 40" & Under | No | $50 |
| Louisiana | September 1984 | Under 5 | Under 5 | Between 3 & 5 in rear seat | $25-$50 |
| Maine | September 1983 | Under 19 | Thru 4 | Between 1 & 4 if not in parent's vehicle | $25-$50 |
| Maryland | January 1984 | Under 10 | Under 4[2] | Between 4 & 10 | $25-$50 |
| Massachusetts | January 1982 | Thru 12 | Under 5 | Under 5 | $25 |
| Michigan | April 1982 | Thru 15 | Thru 4 | 1 thru 4 in rear seat | $10 |
| Minnesota | August 1983 | Under 11 | Under 4 | 4 thru 10 in rear seat | $50 |
| Mississippi | July 1983 | Under 2 | Under 2 | No | $25 |
| Missouri | January 1984 | Under 4 | Under 4 | Under 4 in rear seat | $25 |
| Montana[1] | January 1984 | Under 4[2] | Under 2 | Between 2 & 4 | $10-$25 |
| Nebraska | August 1983 | Under 5[2] | Under 4[2] | Between 4 & 5 | $25 |
| Nevada | July 1983 | Under 5 | Under 5 | Under 5 in rear seat | $35-$100 |
| New Hampshire | July 1983 | Under 12 | Under 5 | Under 5 thru 12 all seat positions | $500 maximum |
| New Jersey | April 1983 | Under 5 | Under 5 | Between 4 & 5 in rear seat | $10-$25 |
| New Mexico | June 1983 | Under 11 | Under 5 | Between 1 & 5 in rear seat | $25 |
| New York | April 1982 | Under 10 | Under 4 | Between 4 & 10 in rear seat | $100 maximum |
| North Carolina | July 1982 | Under 6 | Under 3 | Between 3 & 6 | $25 |
| North Dakota | January 1984 | Thru 10 | Under 3 | 3 thru 10 | $20 |
| Ohio | March 1983 | Under 4[2] | Under 4[2] | Between 1 & 4 if not in parent's vehicle | $10 |
| Oklahoma | November 1983 | Under 5 | Under 4 | Under 4 in rear, 4-5 in front or rear | $25 maximum |
| Oregon | January 1984 | Under 16 | Under 4[2] | Between 1 & 5 | $50 maximum |
| Pennsylvania | January 1984 | Under 4 | Under 4 | Over 4 | $25 |
| Puerto Rico | January 1989 | Under 4 | Under 4 | Over 40 pounds | $10 |
| Rhode Island | July 1980 | Thru 12 | Thru 3 | No | $100 maximum |
| South Carolina | July 1983 | Under 6 | Under 4 | Between 1 & 6 in rear seat | $25 |
| South Dakota | July 1984 | Under 5 | Under 2 | Between 2 & 5 | $20 |
| Tennessee | January 1978 | Under 4 | Under 4 | No | $25-$50 |
| Texas | October 1984 | Under 4 | Under 2 | Between 2 & 4 | $25-$50 |
| Utah | July 1984 | Under 8 | Under 2 | Between 2 & 8 | $20 |
| Vermont | July 1984 | Thru 12 | Under 5 | Between 1 & 5 in rear seat | $25 |
| Virginia | January 1983 | Under 4 | Under 3 | Between 3 & 4 | $50 |
| Washington | January 1984 | Under 6 | Under 2 | Between 2 & 6 | $30 |
| West Virginia | July 1981 | Under 9 | Under 3 | Between 3 & 5 | $10-$20 |
| Wisconsin | November 1982 | Under 8 | Under 4 | Between 5 & 8 | $10-$200 |
| Wyoming | April 1985 | Under 3[2] | Under 3[2] | No | $25 |

[1] Law applies only to parents and legal guardian [2] Or less than 40 pounds. *Most States waive fines upon proof of safety seat acquisition.

U.S. Department of Transportation, Washington, DC 20590
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
Regional Operations (202) 366-2672

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## CHILD SAFETY SEAT USE

Mr. CARR. Please update the data on the use of child safety seats, as shown on page 383 of last year's hearing record, by deleting 1987 and adding 1992.

[The information follows:]

The information provided in the past on the use of child safety seats was based on NHTSA's 19-city observational survey. The last year for which data are available is 1991, after which time the survey was no longer conducted. During the fall of 1994, NHTSA will be conducting a national survey of safety belt use and other occupant protection issues. Inasmuch as the survey is currently in the design stages, the final information to be collected has not yet been determined. However, the agency is considering collecting information on child safety seat use, which, if collected, will be available in late 1994 or early 1995.

## FATALITY RATES BY VEHICLE CATEGORIES

Mr. CARR. Please update the chart found on page 386 of last year's hearing record concerning fatality rates by vehicle categories.

[The information follows:]

FATALITIES IN CRASHES BY VEHICLE TYPE—PERCENT CHANGE FROM 1992–93

| Vehicle type | 1991 | 1992 | 1993 [1] | Percent change 1992–93 |
|---|---|---|---|---|
| Passenger | 22,347 | 21,332 | 21,490 | 1 |
| Light Trucks/Vans | 8,380 | 8,082 | 8,455 | 5 |
| Motorcylce | 2,808 | 2,394 | 2,415 | 1 |
| Med/Hvy Trucks | 544 | 584 | 620 | 6 |
| All Other Vehicles | 621 | 443 | 440 | −1 |
| Non-Occupants (pedestrians and bicyclists) | 6,762 | 6,366 | 6,249 | [1] |
|  | 41,462 | 39,235 | 39,850 | 2 |

[1] 1993 values are preliminary estimates.

## VEHICLE OCCUPANT DEATHS DATA

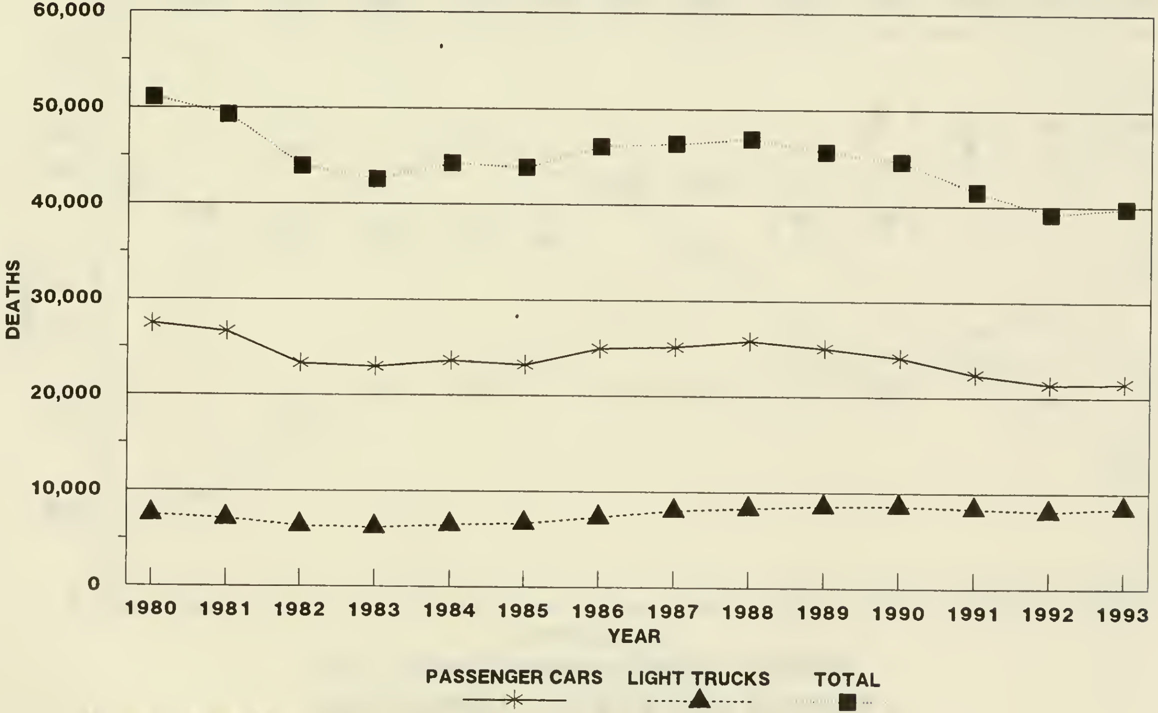
Mr. CARR. Please update for the record the data on vehicle occupant deaths found on pages 387 through 390 of last year's hearing record.

[The information follows:]

# VEHICLE OCCUPANT DEATHS FOR

## PASSENGER CARS AND LIGHT TRUCKS

## 1980 - 1993

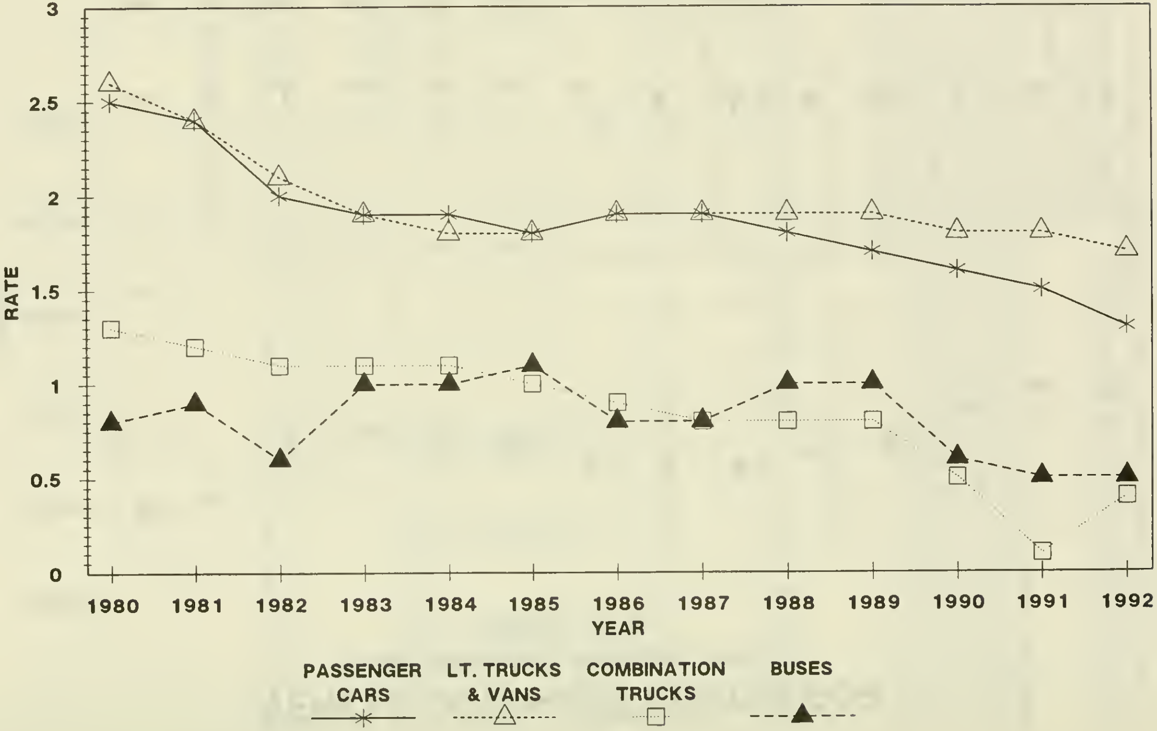


1993 Preliminary Estimates

## OCCUPANT FATALITY RATES

PER 100 MILLION VEHICLE MILES TRAVELED

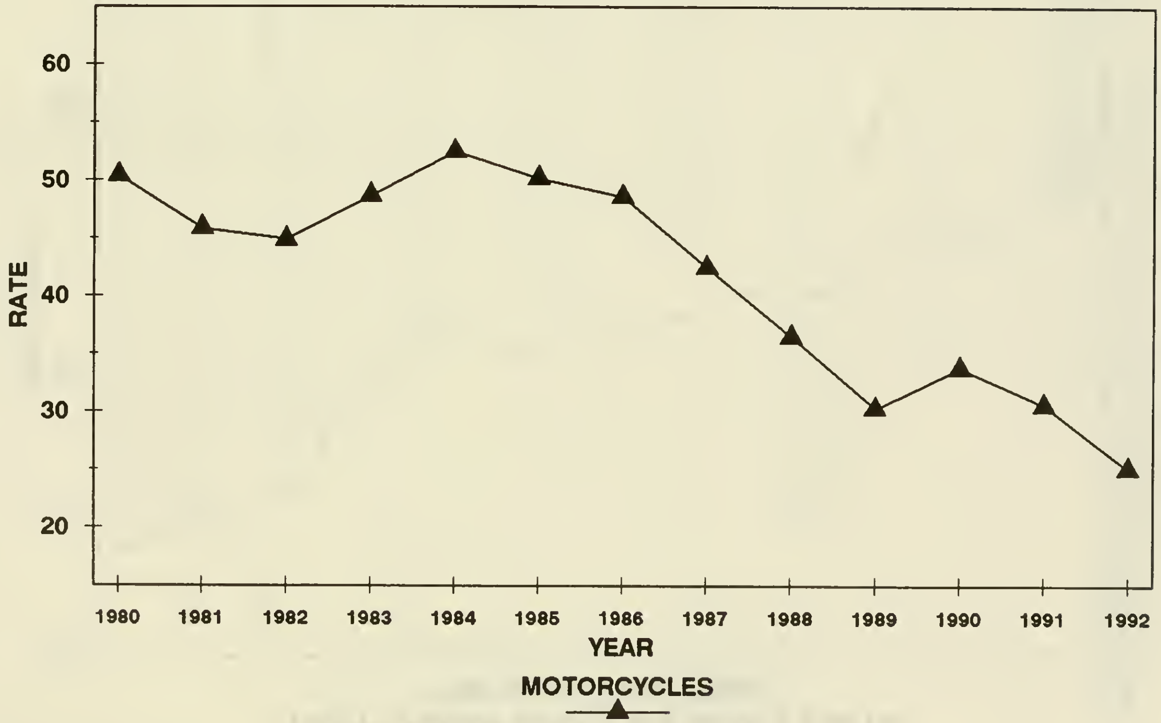
1980 - 1992

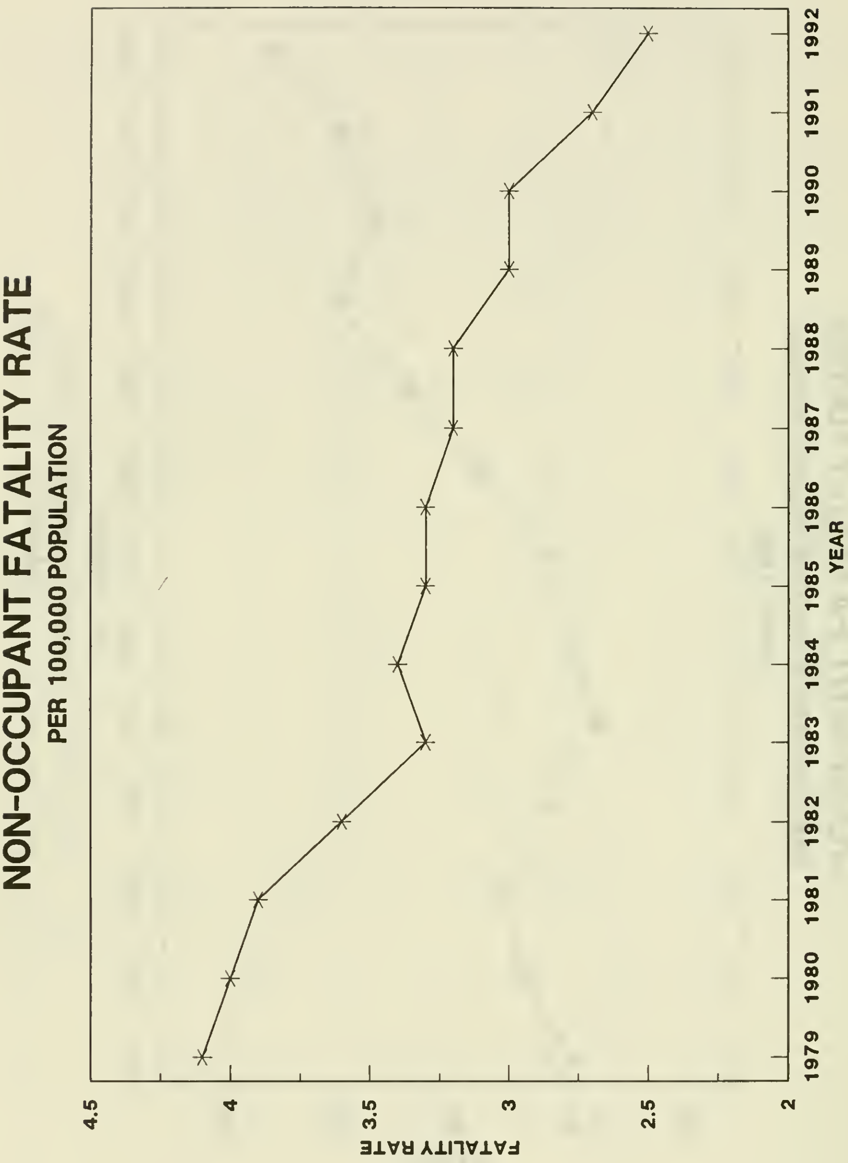


# OCCUPANT FATALITY RATES

## PER 100 MILLION VEHICLE MILES TRAVELED

## 1980 - 1992




NON-OCCUPANT FATALITY RATE
PER 100,000 POPULATION
FATALITY RATE
4.5
4
3.5
3
2.5
2
YEAR
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992

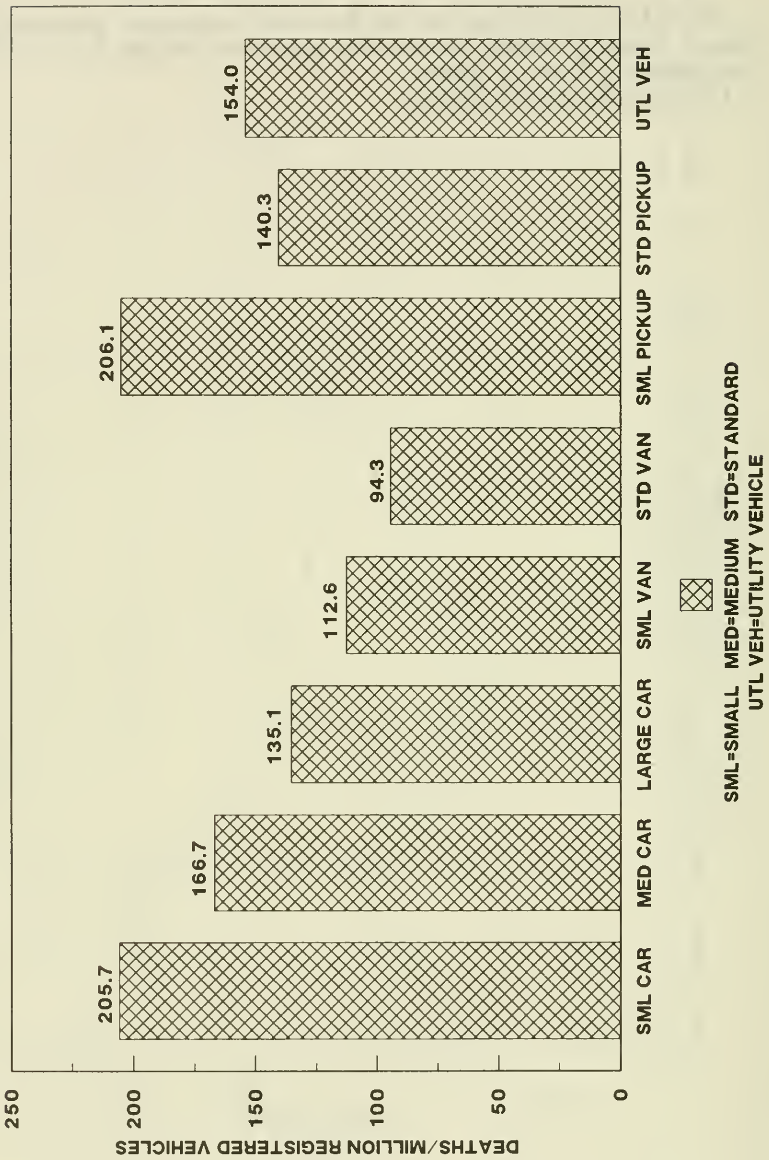
## OCCUPANT DEATHS BY VEHICLE CLASS

Mr. CARR. Please update the bar chart shown on page 400 of last year's hearing record concerning occupant deaths by vehicle class by providing data for 1992.

[The information follows:]

OCCUPANT DEATHS (1992)

PER MILLION REGISTERED VEHICLES



## FATALITIES PER 100 MILLION REGISTERED VEHICLES

Mr. Carr. Please also update for the record the data on fatalities per 100 million registered vehicles, as shown on page 391 of last year's hearing record.

[The information follows:]

FATALITIES PER REGISTERED VEHICLE 1992

| | ACTUAL FATALITIES | POLK DATA ADJUSTED* | REGISTERED VEHICLES | FATALITIES PER MILLION | RATE/ AVERAGE RATE |
|---|---|---|---|---|---|
| SMALL CAR | 12828 | 10754 | 52278648 | 205.7 | 1.2 |
| MEDIUM CAR | 4580 | 3748 | 22481540 | 166.7 | 1.0 |
| LARGE CAR | 3867 | 2393 | 17710643 | 135.1 | 0.8 |
| SMALL VAN | 742 | 579 | 5142167 | 112.6 | 0.7 |
| STANDARD VAN | 652 | 477 | 5057856 | 94.3 | 0.5 |
| SMALL PICKUP | 2527 | 2222 | 10833369 | 205.1 | 1.2 |
| STANDARD PICKUP | 2997 | 2004 | 14288748 | 140.3 | 0.8 |
| UTILITY VEHICLE | 1399 | 1127 | 7318073 | 154.0 | 0.9 |
| TOTAL CARS | 21275 | 16895 | 92470831 | 182.7 | 1.1 |
| TOTAL LIGHT TRUCKS | 8317 | 6409 | 42640213 | 150.3 | 0.9 |
| TOTAL | 29592 | 23304 | 135111044 | 172.5 | 1.0 |

*INCLUDES MODEL YEARS 1978 THRU 1991

COUNTS OF PASSENGER CARS ARE LIMITED TO THOSE WITH KNOWN WHEELBASE

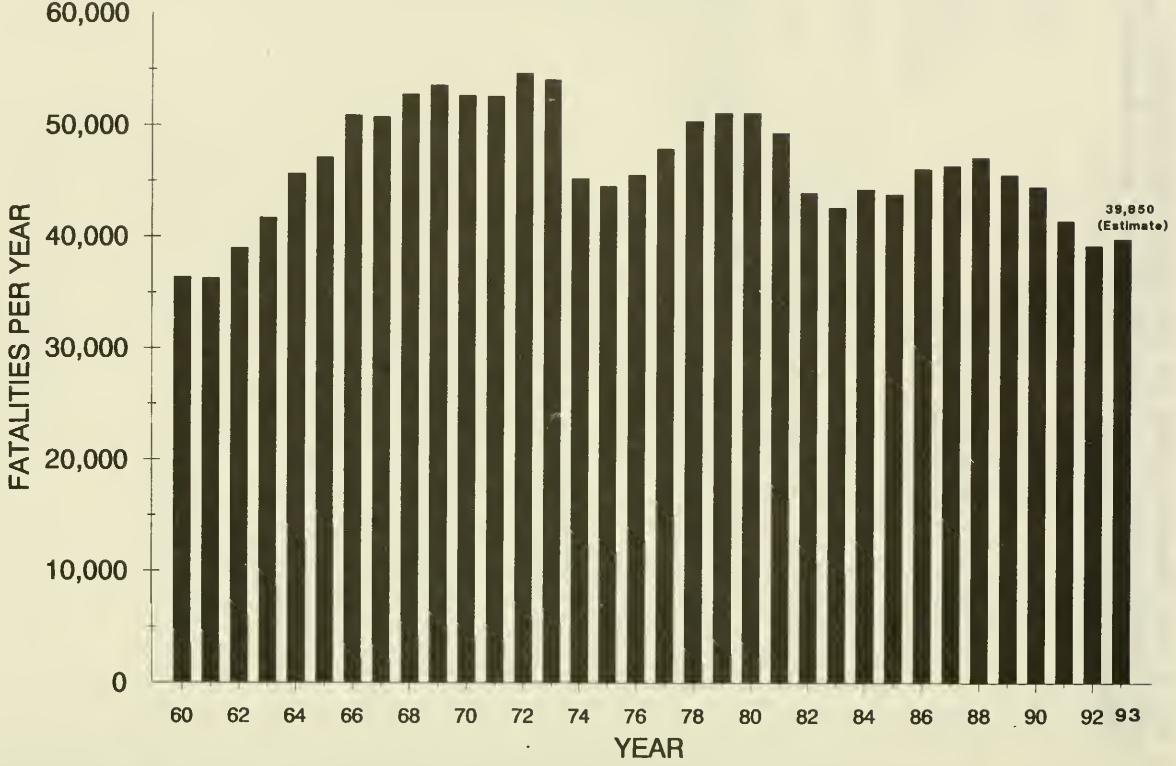
### U.S. TRAFFIC FATALITIES CHART

Mr. CARR. Please update for the record the bar chart on U.S. traffic fatalities shown on page 392 of last year's hearing record.

[The information follows:]

# U.S. TRAFFIC FATALITIES

## BY YEAR, 1960 TO 1993



## MOTOR VEHICLE FATALITY TRENDS

Mr. CARR. Please update the data on motor vehicle fatality trends found on page 394 of last year's hearing record.

[The information follows:]

## Trends in Motor Vehicle Traffic Deaths in the United States 1969, 1979–1993

| Item | 1969 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 * |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Deaths | 53,542 | 51,093 | 51,091 | 49,301 | 43,945 | 42,589 | 44,257 | 43,825 | 46,087 | 46,390 | 47,087 | 45,582 | 44,599 | 41,508 | 39,235 | 39,850 |
| Motor Vehicle Travel (billion vehicle miles) | 1,062 | 1,529 | 1,527 | 1,553 | 1,595 | 1,653 | 1,720 | 1,774 | 1,835 | 1,921 | 2,026 | 2,096 | 2,144 | 2,172 | 2,240 | 2,293 |
| Registered Motor Vehicles (100,000) | 1,074 | 1,573 | 1,615 | 1,641 | 1,654 | 1,693 | 1,717 | 1,771 | 1,809 | 1,839 | 1,890 | 1,917 | 1,929 | 1,925 | 1,944 | 1,969 |
| Resident Population (100,000) | 2,014 | 2,246 | 2,273 | 2,296 | 2,320 | 2,343 | 2,365 | 2,387 | 2,411 | 2,434 | 2,458 | 2,482 | 2,487 | 2,521 | 2,551 | 2,579 |
| Licensed Drivers (100,000) | 1,083 | 1,433 | 1,453 | 1,471 | 1,502 | 1,544 | 1,554 | 1,569 | 1,595 | 1,618 | 1,629 | 1,656 | 1,670 | 1,690 | 1,731 | 1,759 |
| DEATH RATES | | | | | | | | | | | | | | | | |
| Per Hundred Million Vehicle Miles | 5.0 | 3.3 | 3.3 | 3.2 | 2.8 | 2.6 | 2.6 | 2.5 | 2.5 | 2.4 | 2.3 | 2.2 | 2.1 | 1.9 | 1.8 | 1.7 |
| Per 100,000 Registered Vehicles | 49.85 | 32.48 | 31.64 | 30.04 | 26.57 | 25.16 | 25.78 | 24.75 | 25.48 | 25.23 | 24.91 | 23.78 | 23.12 | 21.56 | 20.18 | 20.24 |
| Per 100,000 Resident Population | 26.58 | 22.75 | 22.48 | 21.47 | 18.94 | 18.18 | 18.71 | 18.36 | 19.12 | 19.06 | 19.16 | 18.37 | 17.93 | 16.46 | 15.38 | 15.45 |
| Per 100,000 Licensed Drivers | 49.44 | 35.65 | 35.16 | 33.52 | 29.26 | 27.58 | 28.48 | 27.93 | 28.89 | 28.67 | 28.91 | 27.53 | 26.71 | 24.56 | 22.67 | 22.65 |
| VEHICLE AND DRIVER RELATIONSHIP | | | | | | | | | | | | | | | | |
| Ratio, Registered Motor Vehicles to Licensed Drivers | 0.99 | 1.10 | 1.11 | 1.12 | 1.10 | 1.10 | 1.10 | 1.13 | 1.13 | 1.14 | 1.16 | 1.16 | 1.16 | 1.14 | 1.12 | 1.12 |
| Ratio, Registered Motor Vehicles to Resident Population | 0.53 | 0.70 | 0.71 | 0.71 | 0.71 | 0.72 | 0.73 | 0.74 | 0.75 | 0.76 | 0.77 | 0.77 | 0.78 | 0.76 | 0.76 | 0.76 |
| Ratio, Licensed Drivers to Resident Population | 0.54 | 0.64 | 0.64 | 0.64 | 0.65 | 0.66 | 0.66 | 0.66 | 0.66 | 0.66 | 0.66 | 0.67 | 0.67 | 0.67 | 0.68 | 0.68 |

* Preliminary Estimate

Source: Fatalities – Fatal Accident Reporting System (FARS), NHTSA.
Registered Vehicles, Licensed Drivers
Vehicle Miles of Travel – Federal Highway Administration.
Population – Bureau of the Census.

## HIGHWAY FATALITIES FOR SELECTED COUNTRIES

Mr. CARR. Please provide some data comparing the United States to other countries with regard to highway fatalities per 100,000 population and highway fatalities per vehicle miles travelled.

[The information follows:]

## HIGHWAY FATALITIES PER 100,000 POPULATION FOR SELECTED COUNTRIES

| | 1990 Fatality Rate | 1991 Fatality Rate | 1992 Fatality Rate |
|---|---|---|---|
| Austria | 18.20 | 17.74 | 15.94 |
| Australia | 13.68 | 12.22 | N/A |
| Belgium | 19.94 | 18.88 | 16.72 |
| Canada | 14.91 | 13.73 | N/A |
| Denmark | 12.36 | 11.81 | 11.14 |
| Finland | 13.04 | 12.66 | 11.92 |
| France | 18.26 | 16.99 | 15.83 |
| Germany | 12.50 | 11.74 | 13.19 |
| Greece | 17.32 | 17.82 | N/A |
| Hungary | 23.01 | 20.08 | 20.36 |
| Ireland | 13.66 | 12.75 | 11.67 |
| Italy | 11.48 | 12.98 | N/A |
| Japan | 9.09 | 8.95 | N/A |
| Mexico | 6.25 | 6.33 | N/A |
| Netherlands | 9.17 | 8.53 | 8.47 |
| New Zealand | 22.15 | 19.64 | N/A |
| Norway | 7.81 | 7.56 | 7.55 |
| Poland | 19.41 | 20.90 | 18.11 |
| Portugal | 22.42 | 23.83 | 22.74 |
| Romania | 16.25 | 13.16 | 12.38 |
| Spain | 17.69 | 17.26 | 15.39 |
| Sweden | 9.05 | 8.70 | 8.74 |
| Switzerland | 14.15 | 12.68 | 12.09 |
| Turkey | 10.97 | 10.68 | 10.53 |
| United Kingdom | 9.42 | 8.26 | 7.57 |
| U.S.A. | 17.88 | 16.27 | 15.38 |

Source: "Statistics of Road Traffic Accidents in Europe"
(United Nations)
"World Road Statistics"
(International Road Federation)

## HIGHWAY FATALITIES PER 100 MILLION VEHICLE KILOMETERS TRAVELED FOR SELECTED COUNTRIES

| | 1989 FATALITY RATE | 1990 FATALITY RATE | 1991 FATALITY RATE | 1992 FATALITY RATE |
|---|---|---|---|---|
| AUSTRIA | 3.5(4) | 3.4 | 3.2 | 2.9 |
| BELGIUM | 3.7 | N/A | 3.3 | N/A |
| DENMARK | 1.9 | 1.7 | 1.6 | 1.5 |
| FINLAND | 1.9 | 1.6 | 1.6 | 1.4 |
| FRANCE | 2.5(3) | 2.4(3) | 2.2 | 2.0 |
| GERMANY (FEDERAL REPUBLIC) | 1.8 | 1.7 | 2.1 | 1.9 |
| GREAT BRITAIN | 1.7 | N/A | 1.1 | N/A |
| IRELAND | 1.9 | 1.9 | 1.8 | 1.5 |
| ITALY | 1.8 | 1.7 | 1.9 | N/A |
| JAPAN | 1.9(2) | 1.9(2) | 1.8 | 1.7 |
| MEXICO | 9.8 | 10.0 | N/A | N/A |
| NETHERLANDS | 1.5(1) | 1.4(1) | 1.3 | 1.3 |
| NORWAY | N/A | 1.2 | 1.2 | 1.2 |
| SPAIN | 6.8(2) | N/A | N/A | 4.8(2) |
| SWEDEN | 1.4 | 1.2 | 1.0 | N/A |
| TURKEY | 24 | 23 | 24 | 22 |
| UNITED STATES | 1.3 | 1.3 | 1.2 | 1.1 |

SOURCE: "Statistics of Road Traffic Accidents in Europe" (United Nations)
"World Road Statistics" (International Road Federation)

N/A – Not Available

(1) Excludes Cyclists
(2) Deaths within 24 hours
(3) Deaths within 6 days
(4) Deaths within 3 days

Note: VMT used to compute rates are based on estimates of varing degree of accuracy. They should therefore be regarded rather as order of magnitude than as precise statistics.

## STATE RANKING BY FATALITY RATE

Mr. CARR. Please update for the record the tables on state ranking by fatality rate, as shown on page 396 of last year's hearing record by providing data for 1992.

[The information follows:]

# 1992 RANKING OF STATE FATALITY RATES

| RANK | STATE | FATALITIES | VEHICLE MILES TRAVELED (MILLIONS) | *RATE PER 100 MILLION VMT |
|---|---|---|---|---|
| 1 | MISSISSIPPI | 766 | 26,239 | 2.9 |
| 2 | ALASKA | 108 | 3,841 | 2.8 |
| 3 | LOUISIANA | 883 | 33,853 | 2.6 |
| 4 | WEST VIRGINIA | 420 | 16,478 | 2.5 |
| 5 | ARKANSAS | 588 | 23,081 | 2.5 |
| 6 | NEW MEXICO | 460 | 18,452 | 2.5 |
| 7 | ARIZONA | 809 | 35,047 | 2.3 |
| 8 | TENNESSEE | 1,153 | 49,994 | 2.3 |
| 9 | NEVADA | 251 | 10,897 | 2.3 |
| 10 | SOUTH CAROLINA | 807 | 35,049 | 2.3 |
| 11 | IDAHO | 243 | 10,764 | 2.3 |
| 12 | ALABAMA | 1,031 | 45,762 | 2.3 |
| 13 | MONTANA | 192 | 8,525 | 2.3 |
| 14 | SOUTH DAKOTA | 161 | 7,218 | 2.2 |
| 15 | KENTUCKY | 815 | 38,062 | 2.1 |
| 16 | FLORIDA | 2,427 | 114,311 | 2.1 |
| 17 | DELAWARE | 140 | 6,892 | 2.0 |
| 18 | WYOMING | 118 | 6,217 | 1.9 |
| 19 | NORTH CAROLINA | 1,265 | 67,538 | 1.9 |
| 20 | TEXAS | 3,059 | 163,329 | 1.9 |
| 21 | MISSOURI | 985 | 53,254 | 1.8 |
| 22 | NEBRASKA | 269 | 14,621 | 1.8 |
| 23 | IOWA | 437 | 23,926 | 1.8 |
| 24 | COLORADO | 522 | 28,927 | 1.8 |
| 25 | MAINE | 214 | 12,151 | 1.8 |
| 26 | OKLAHOMA | 613 | 35,119 | 1.7 |
| 27 | PENNSYLVANIA | 1,545 | 89,200 | 1.7 |
| 28 | GEORGIA | 1,315 | 77,904 | 1.7 |
| 29 | OREGON | 467 | 27,926 | 1.7 |
| 30 | NEW YORK | 1,814 | 109,881 | 1.7 |
| 31 | UTAH | 269 | 16,307 | 1.6 |
| 32 | KANSAS | 387 | 24,163 | 1.6 |
| 33 | HAWAII | 129 | 8,066 | 1.6 |
| 34 | CALIFORNIA | 4,189 | 262,548 | 1.6 |
| 35 | VERMONT | 96 | 6,019 | 1.6 |
| 36 | ILLINOIS | 1,384 | 87,642 | 1.6 |
| 37 | INDIANA | 901 | 57,072 | 1.6 |
| 38 | MARYLAND | 659 | 41,896 | 1.6 |
| 39 | MICHIGAN | 1,298 | 84,219 | 1.5 |
| 40 | OHIO | 1,439 | 95,221 | 1.5 |
| 41 | NORTH DAKOTA | 88 | 6,072 | 1.4 |
| 42 | MINNESOTA | 581 | 41,162 | 1.4 |
| 43 | DIST OF COL | 50 | 3,562 | 1.4 |
| 44 | WISCONSIN | 652 | 47,628 | 1.4 |
| 45 | VIRGINIA | 839 | 63,447 | 1.3 |
| 46 | WASHINGTON | 651 | 49,386 | 1.3 |
| 47 | NEW JERSEY | 764 | 59,410 | 1.3 |
| 48 | NEW HAMPSHIRE | 122 | 10,067 | 1.2 |
| 49 | CONNECTICUT | 296 | 26,459 | 1.1 |
| 50 | RHODE ISLAND | 79 | 7,676 | 1.0 |
| 51 | MASSACHUSETTS | 485 | 47,348 | 1.0 |
|  | TOTAL | 39,235 | 2,239,828 ** | 1.8 |

* RANKING OF STATES IS BASED ON ACTUAL FATALITY RATE WHICH IS SHOWN TO ONE DECIMAL PLACE FOR REPORTING PURPOSES.

** THE SUM OF INDIVIDUAL STATE VMT MAY NOT EQUAL NATIONAL TOTALS BECAUSE NUMBERS HAVE BEEN ROUNDED.

SOURCES: FATALITIES - FATAL ACCIDENT REPORTING SYSTEM (FARS)
VEHICLE MILES OF TRAVEL - FEDERAL HIGHWAY ADMINISTRATION (FHWA)

November 16, 1993

## STATE TRAFFIC FATALITIES DATA

Mr. CARR. Please update the data on state traffic fatalities as shown on page 398 of last year's hearing record.

[The information follows:]

The following table updates the data on state traffic fatal crashes shown on page 398 of last year's hearing record. State-level data for 1993 are not yet available.

## FATAL CRASHES BY STATE

| | TOTAL | | | | PERCENT CHANGE | | |
|---|---|---|---|---|---|---|---|
| STATE | 1992 | 1991 | 1983 | 1980 | 80 to 83 | 83 to 91 | 91 to 92 |
| ALABAMA | 921 | 984 | 806 | 835 | −3 | 22 | −6 |
| ALASKA | 89 | 90 | 135 | 79 | 71 | −33 | −1 |
| ARIZONA | 701 | 727 | 616 | 833 | −26 | 18 | −4 |
| ARKANSAS | 512 | 530 | 485 | 486 | −0 | 9 | −3 |
| CALIFORNIA | 3,719 | 4,194 | 4089 | 4930 | −17 | 3 | −11 |
| COLORADO | 477 | 480 | 591 | 625 | −5 | −19 | −1 |
| CONNECTICUT | 266 | 281 | 404 | 520 | −22 | −30 | −5 |
| DELAWARE | 118 | 90 | 98 | 135 | −27 | −8 | 31 |
| DIST OF COLUMBIA | 47 | 60 | 58 | 38 | 53 | 3 | −22 |
| FLORIDA | 2,170 | 2,217 | 2415 | 2519 | −4 | −8 | −2 |
| GEORGIA | 1,184 | 1,226 | 1157 | 1348 | −14 | 6 | −3 |
| HAWAII | 122 | 119 | 133 | 167 | −20 | −11 | 3 |
| IDAHO | 207 | 221 | 231 | 287 | −20 | −4 | −6 |
| ILLINOIS | 1,249 | 1,289 | 1379 | 1776 | −22 | −7 | −3 |
| INDIANA | 797 | 903 | 876 | 1029 | −15 | 3 | −12 |
| IOWA | 388 | 423 | 437 | 541 | −19 | −3 | −8 |
| KANSAS | 337 | 350 | 361 | 506 | −29 | −3 | −4 |
| KENTUCKY | 718 | 722 | 690 | 746 | −8 | 5 | −1 |
| LOUISIANA | 789 | 783 | 836 | 1080 | −23 | −6 | 1 |
| MAINE | 189 | 181 | 198 | 236 | −16 | −9 | 4 |
| MARYLAND | 584 | 629 | 607 | 682 | −11 | 4 | −7 |
| MASSACHUSETTS | 460 | 510 | 605 | 813 | −26 | −16 | −10 |
| MICHIGAN | 1,177 | 1,287 | 1192 | 1561 | −24 | 8 | −9 |
| MINNESOTA | 494 | 469 | 498 | 742 | −33 | −6 | 5 |
| MISSISSIPPI | 649 | 606 | 626 | 603 | 4 | −3 | 7 |
| MISSOURI | 874 | 906 | 810 | 1025 | −21 | 12 | −4 |
| MONTANA | 172 | 172 | 253 | 276 | −8 | −32 | 0 |
| NEBRASKA | 222 | 242 | 221 | 337 | −34 | 10 | −8 |
| NEVADA | 224 | 261 | 220 | 302 | −27 | 19 | −14 |
| NEW HAMPSHIRE | 110 | 135 | 166 | 175 | −5 | −19 | −19 |
| NEW JERSEY | 695 | 737 | 866 | 1022 | −15 | −15 | −6 |
| NEW MEXICO | 398 | 422 | 467 | 513 | −9 | −10 | −6 |
| NEW YORK | 1,656 | 1,827 | 1918 | 2374 | −19 | −5 | −9 |
| NORTH CAROLINA | 1,124 | 1,213 | 1083 | 1327 | −18 | 12 | −7 |
| NORTH DAKOTA | 79 | 86 | 105 | 133 | −21 | −18 | −8 |
| OHIO | 1,302 | 1,451 | 1416 | 1805 | −22 | 2 | −10 |
| OKLAHOMA | 535 | 551 | 720 | 820 | −12 | −23 | −3 |
| OREGON | 412 | 423 | 485 | 585 | −17 | −13 | −3 |
| PENNSYLVANIA | 1,385 | 1,510 | 1544 | 1882 | −18 | −2 | −8 |
| RHODE ISLAND | 73 | 84 | 96 | 118 | −19 | −13 | −13 |
| SOUTH CAROLINA | 719 | 789 | 739 | 747 | −1 | 7 | −9 |
| SOUTH DAKOTA | 141 | 130 | 147 | 188 | −22 | −12 | 8 |
| TENNESSEE | 1,027 | 1,002 | 919 | 1007 | −9 | 9 | 2 |
| TEXAS | 2,691 | 2,697 | 3328 | 3814 | −13 | −19 | −0 |
| UTAH | 235 | 229 | 253 | 291 | −13 | −9 | 3 |
| VERMONT | 87 | 100 | 87 | 125 | −30 | 15 | −13 |
| VIRGINIA | 760 | 845 | 803 | 938 | −14 | 5 | −10 |
| WASHINGTON | 592 | 602 | 628 | 847 | −26 | −4 | −2 |
| WEST VIRGINIA | 366 | 371 | 379 | 464 | −18 | −2 | −1 |
| WISCONSIN | 586 | 677 | 648 | 847 | −23 | 4 | −13 |
| WYOMING | 99 | 104 | 152 | 205 | −26 | −32 | −5 |
| U.S. TOTAL | 34,928 | 36,937 | 37,976 | 45,284 | −16 | −3 | −5 |

## SPEED AS A NATIONAL PRIORITY

Mr. CARR. Speed is one of the new national priorities added to the Section 402 program. What was the justification for this addition, and how will the Section 403 speed program be integrated with activities conducted under the Section 402 program?

[The information follows:]

Prior to adding new Section 402 priority program areas, the agency must conduct a public rulemaking process. On January 14, 1994, NHTSA issued a notice of proposed rulemaking (NPRM) which tentatively proposed making speed control a national priority program area. The justification is based on data that shows speeding is cited as a contributing factor in 34 percent of all fatal crashes and that effective speed control countermeasures are available to states. The comment period ended on February 28; the agency is now reviewing comments received prior to making a final determination.

If speed control is added to the Section 402 priority list, integration with the Section 403 program will follow the same approach as with all other program areas. The 403 funding is used to develop and demonstrate new countermeasures, and the Section 402 funding is used by the states to implement those countermeasures shown to be effective. For example, Section 403 funds are currently being used for demonstration programs to evaluate speed control devices (radar, VASCAR, etc.) and to introduce those devices into the law enforcement community. Section 402 funds could be used to purchase the equipment and to train enforcement personnel in its use.

## MUNICIPAL SPEED ENFORCEMENT DEMONSTRATION

Mr. CARR. The justifications refer to a municipal speed enforcement demonstration project that will be initiated during fiscal year 1994 and continued in fiscal year 1995. What are the objectives of this demonstration, which municipalities are involved, when will the demonstration be completed, and how much will be allocated to it in fiscal years 1994 and 1995?

[The information follows:]

NHTSA estimates that speed related crashes cost society in excess of $19 billion each year. Approximately 48% of all speed related fatal crashes occurred on roads with speed limits of less than 55 mph, many occurring in municipalities.

This demonstration program will attempt to develop effective countermeasures for municipal law enforcement agencies. This will be accomplished utilizing technologically advanced speed measuring devices with no increase in enforcement personnel. Part of the program will measure the effect of increased enforcement on certain criminal activities.

The contract was awarded September 30, 1993, totaling $229,630. Site selection with the contractor is currently underway and should be completed in April 1994. Completion of the project is scheduled for Summer 1995. Incremental funding for the project is: FY 94 $75,079 and FY 95 $47,251.

## TRAFFIC ENFORCEMENT—NEW TECHNOLOGIES

Mr. CARR. What new and innovative technologies will be field tested for traffic enforcement during fiscal year 1995?

[The information follows:]

We plan to complete a demonstration program that will allow more accurate and efficient reconstruction of extraordinary commercial vehicle crashes which occur on major multilane roadways. This project is designed to gather necessary information and restore the normal flow of traffic in a more timely manner.

The Agency also plans to complete an interactive law enforcement training program that maximizes training opportunities. This multimedia program will permit offsite training for certain traffic related standardized law enforcement courses, such as radar training, that are necessary for State certification.

Further, a program to develop and pilot test in-car video will be completed. This project will train officers in the proper use of video for evidentiary use.

## TRAFFIC ENFORCEMENT—ASSISTANCE TO FHWA

Mr. CARR. What type of assistance does NHTSA provide to the FHWA Office of Motor Carriers regarding traffic enforcement activities conducted through the MCSAP program?

[The information follows:]

NHTSA has a close working relationship with the FHWA Office of Motor Carriers. We will continue our work with law enforcement officials and groups to emphasis increased commercial motor vehicle safety and traffic enforcement as part of an agency's overall enforcement program. We will encourage increased traffic enforcement and truck inspections by regular patrol officers to reduce commercial motor vehicle incidents.

NHTSA will also continue to offer, when requested, standardized field sobriety testing and drug recognition techniques so MCSAP inspectors can better identify the impaired commercial vehicle drivers.

Assistance was provided to guide implementation of the ban on the use of radar detectors in commercial vehicles. We will provide technical assistance on enforcement techniques, including proper use of drone radar as authorized by the FCC.

Further, NHTSA is able to assist FHWA work with law enforcement leaders and associations. For example, NHTSA, in cooperation with FHWA, is working with the International Association of Chiefs of Police and the four southwest border states to study the impact the North American Free Trade Agreement (NAFTA) will have on commercial vehicle enforcement.

## TECHNICAL ASSISTANCE TO STATES RELATING TO ENFORCEMENT EFFORTS

Mr. CARR. Will NHTSA provide any technical assistance to states relating to their enforcement of the recently announced ban on the use of radar detection devices in commercial vehicles?

[The information follows:]

NHTSA supports the FHWA rule banning the use of radar detectors by drivers of commercial motor vehicles. In addition, NHTSA supports Secretary Peña's position that " . . . radar detectors are used for the purpose of evading the enforcement of speed limits. Since excessive speed is often a factor in accidents, taking radar detectors out of large vehicles should enhance safety for all highway users—including truck and bus drivers themselves.

NHTSA will respond to any request for technical assistance to provide effective enforcement strategies to counter radar detector use for traffic enforcement. Additionally, the Agency will provide technical assistance in the proper use of drone radar as authorized by the FCC.

## RADAR DETECTORS—NHTSA/FHWA STUDY ON COMMERCIAL VEHICLES

Mr. CARR. In the Senate report on the 1994 transportation appropriations bill, the Senate requested FHWA, in conjunction with NHTSA and other groups, to conduct a study concerning whether commercial vehicles with radar detectors are overrepresented in crashes involving speeding. The study is to be completed by July 1, 1994. What is NHTSA's role in the study?

[The information follows:]

Since FHWA is not required to conduct this study, there is no NHTSA role. By letter dated January 31, 1994, Senator Frank R. Lautenberg, Chairman, Subcommittee on Transportation and Related Agencies, wrote that, "In view of the issuance of the Final Rule [58 FR 67370, December 21, 1993], the directive from the Senate Committee on Appropriations, contained in Senate Report No. 103–143 . . . is not necessary. The implementation of the final rule . . . obviates the need for the requested study."

## EVALUATION OF THE EFFECTIVENESS OF COMBINED ENFORCEMENT STRATEGIES

Mr. CARR. What were the results of NHTSA's evaluation of the effectiveness of combined enforcement strategies that focus on speed, alcohol, and safety belts?

[The information follows:]

This study was designed to determine the impact of a well-publicized combined speed, alcohol, and safety belt enforcement program in three test sites. This approach was designed to make enforcement more efficient in raising perceived risk of arrest for each type of violation, and also to achieve increased deterrence by creating a perception of more severe penalties for multiple violations occurring in a single incident. Each test program was designed to sequentially emphasize five different combined enforcement strategies during a period of approximately one year. This design was used to determine the potential of a continuously operating combined program. The type of combined program that uses periodic "blitzes" (i.e., brief periods of high intensity publicity followed by a 1–2 week intensive enforcement program) was not evaluated as part of this project.

The results from this study are mixed. In two of the test sites it was not possible to consistently maintain increased enforcement activity and associated publicity. The one test site that was able to maintain increased enforcement intensity and a high level of publicity did produce positive results. Decreases in alcohol-related crashes (10%) and speeding behavior (12%—exceeding speed limit by at least 5 mph) were noted. No effect of safety belt usage was found, although it should be noted that the test city ordinance only allowed secondary enforcement. It should also be noted that this test site started its program with relatively high belt usage rates, and was able to maintain these rates throughout the program.

## EMS PROGRAM OBJECTIVES

Mr. CARR. What are the objectives of NHTSA's emergency medical services program?

[The information follows:]

The objective of NHTSA's EMS program is to reduce death, disability, injury severity, and resulting health care costs from highway crashes by enhancing EMS systems, particularly in rural areas. When crashes occur and people are injured, EMS becomes an essential component of the highway safety effort. NHTSA's EMS efforts focus on developing comprehensive EMS systems nationwide through technical assistance, research and demonstrations, curricula development, and injury prevention.

Mr. CARR. How do you measure the success of the EMS program?

[The information follows:]

The success of NHTSA's EMS program is measured in several ways. One measure of its success is the demand for EMS technical assistance and the institutionalization of programs by the States. The majority of States have voluntarily adopted NHTSA EMS programs in their State statute or regulations as the minimum standard (e.g. the DOT National Standard Curricula for EMS training is used by every State). The State EMS Assessments Program and the Development of Trauma Systems Seminar are two examples of technical assistance programs in high demand from the States that are consistently evaluated by State officials and participants as effective programs.

Another measure is the progress of States in implementing the EMS assessment report recommendations. NHTSA will continue to provide technical assistance to the States to improve their EMS/trauma systems based on the findings of the assessment reports. These statewide advancements will improve EMS/trauma system care nationwide.

The EMS Division's products and programs are routinely peer reviewed by State and industry experts. Their comments are used to improve upon the projects and services offered by the Division.

It is very difficult to measure success using national data since the agency has learned from the Statewide EMS Technical Assessments that States do not collect uniform prehospital data. NHTSA is working to improve statewide data collection by developing a uniform prehospital EMS data element dictionary which will provide guidance to the States on essential and desired data elements needed to effectively evaluate prehospital operations. A consensus conference on uniform prehospital data elements was held in August 1993, with a final data element dictionary to be published in May 1994.

NHTSA is currently conducting two studies to evaluate preventable deaths in rural areas. Results from these studies will be analyzed with a previous study completed in Montana to identify where in the continuum of emergency medical care patients are dying and where to focus limited Federal, State, and local resources. Previous research studies identified preventable mortality to be around twenty-five percent. In areas that have comprehensive EMS systems, preventable mortality has been reduced to as low as one percent.

## EMS STATEWIDE ASSESSMENTS

Mr. CARR. Which states have received statewide assessments of their emergency medical services programs by NHTSA?

[The information follows:]

To this date NHTSA has conducted a total of 40 EMS Assessments: 37 states, the territories of Guam and Puerto Rico, and the Indian Health Service (Department of Health and Human Services). The following is a listing of completed EMS Assessments:

Connecticut, New Hampshire, Massachusetts, Delaware, Maryland, Pennsylvania, Virginia, West Virginia, New Jersey, New York, Puerto Rico, Alabama, Florida, Kentucky, Mississippi, North Carolina, Arkansas, Louisiana, Oklahoma, Texas, Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin, Iowa, Colorado, Montana, North Dakota, Utah, Wyoming, Arizona, Guam, Hawaii, Nevada, Indian Health Service, Alaska, Idaho, and Oregon.

Mr. CARR. What have these assessments revealed?

[The information follows:]

There are widespread problems in all components of EMS systems but the administrative and evaluative components are the most troublesome. Comprehensive enabling legislation, for either EMS or trauma system development, is not in place. The authority for EMS system management often rests within several agencies and there is no central focus for EMS development. Also, EMS agencies lack a clear management structure for planning and policy setting, and statewide EMS plans have not been developed. The functional capabilities of the hospitals that receive trauma patients are not well known, and trauma center designation is sporadic.

Prehospital data are not uniformly collected for system monitoring and evaluation purposes. Prehospital data are not linked to other EMS-related databases and the States are unable to track the patient from the crash until hospital discharge; the States cannot adequately evaluate patient outcome or system performance.

Overall, problems in rural emergency care have not been well studied and demand more attention.

Mr. CARR. What new state assessments are planned?

[The information follows:]

NHTSA has scheduled assessments for South Dakota, Kansas, and New Mexico for fiscal year 1994, and preliminary discussions are being held with Vermont, South Carolina, and Georgia for future assessments.

## RURAL MORTALITY PREVENTION STUDY

Mr. CARR. What were the results of the rural mortality prevention study in Montana?

[The information follows:]

The study found the overall preventability rate for the 154 deaths reviewed was 17 percent. Considering only hospital deaths, as previous studies had done, the overall rate was 33 percent. The overall preventability rate for hospital deaths does not vary significantly from findings of previous studies conducted in predominately urban settings. Preventable deaths were stratified by phase of care, with 7.7 percent occurring as a result of deficiencies in prehospital phases, 53.8 percent in the emergency department, and 38.5 percent due to post emergency department deficiencies in care.

Demographics and mechanism of injury did not differ greatly from those reported in other studies of trauma deaths. Motor vehicle related trauma predominated, accounting for 55 percent of the deaths. In cases where information on occupant restraints was available, 86 percent were unrestrained. Fifty-one percent of motor vehicle fatalities had detectable levels of alcohol and 49 percent of driver and pedestrian fatalities were legally intoxicated. This study reveals that the rate of preventable death and appropriate care in rural areas is high and similar to that found in urban areas before organized systems of trauma care have been implemented. Findings of this and other studies clearly indicate a need to further develop and enhance trauma care systems, particularly in rural areas.

Mr. CARR. Which states are being considered for additional rural mortality studies and why?

[The information follows:]

NHTSA is conducting two additional studies in Michigan and in North Carolina. These two study areas were selected based on a competitive process. Assuming that the two current studies will validate the Montana findings, no new studies are contemplated.

## EMS CURRICULUM DEVELOPMENT

Mr. CARR. Please elaborate on your EMS curriculum development and update activities in fiscal year 1994 and fiscal year 1995.

[The information follows:]

NHTSA has responsibility for the development of EMS training courses. Twelve courses developed to date have been designed to provide national guidelines for EMS training, and in most cases have been incorporated into state statutes and regulations. All states use the DOT National Standard Curricula (NSC) as a basis for their EMS training.

The revision of the Emergency Medical Technician-Basic: National Standard Curriculum (EMT–B) was completed March 1, 1994. This is the platform from which all other EMT levels are developed. In FY 1993 NHTSA awarded two contracts to revise: the EMS Dispatcher: National Standard Curriculum; and 2) the Ambulance Driver Training: National Standard Curriculum. In FY 1994 two contracts will be awarded to revise the EMS Instructor: National Standard Curriculum; and 2) the First Responder: National Standard Curriculum. NHTSA anticipates initiating the revision the EMT-Intermediate and EMT-Paramedic National Standard Curricula in FY 1995, which will be a multi-year effort.

## NATIONAL CONFERENCE ON PREHOSPITAL EMS DATA ELEMENTS

Mr. CARR. What was the purpose of the national conference on prehospital EMS data elements and what recommendations were made?

[The information follows:]

The purpose of the prehospital EMS data element conference was to evaluate available information on the definitions of prehospital data elements and to produce consensus statements on those data element definitions recommended for uniform national use.

Consensus was developed on 81 prehospital EMS data element definitions, 49 of which were recommended as "essential" and 42 of which were recommended as "desirable" for collection of uniform information needed on prehospital EMS responses.

The conference also developed consensus statements on several questions and issues relating to prehospital EMS data including: (1) the purposes of EMS data collection, (2) the needs for uniform EMS data element definitions, (3) the need for improving data quality, and (4) record linkage and outcome measures.

## EMS—TRANSFER OF CURRICULUM DEVELOPMENT ACTIVITIES

Mr. CARR. Has NHTSA undertaken any evaluation of the extent to which EMS curriculum development activities could be transferred to the private sector and, if not, why not?

[The information follows:]

NHTSA has not conducted any evaluation of the extent to which EMS curriculum development could be transferred to the private sector.

NHTSA has the responsibility for the development of EMS training courses that are responsive to the guidelines established by the Highway Safety Act of 1966. As a result of the Highway Safety Act, National Standard Curricula (NSC) for all levels of prehospital care have been developed by NHTSA. There are approximately 700,000 currently certified First Responders, EMT-Basics, EMT-Intermediates, and EMT-Paramedics trained to the DOT National Standard Curricula.

No other Federal agency is legislatively mandated to develop EMS curricula and no private agency, organization, nor institution represents the broad spectrum of EMS without a specific special interest in a segment of the EMS system. NHTSA represents a standard and accepted source, provides economies of scale and national standardization.

Most states require DOT/NSC as a basis for their training and have codified such requirements. Failure to provide DOT/NSC to the states would require legislative change in many states. Both the National Association of State EMS Directors and the National Council of State EMS Training Coordinators have passed resolutions encouraging NHTSA to continue its National Standard Curriculum Development Program.

## OLDER DRIVER RESEARCH PROGRAM

Mr. CARR. Please highlight the accomplishments of your older driver research program and discuss how it differs from research on older drivers conducted by NHTSA and FHWA under the IVHS program.

[The information follows:]

IVHS-oriented research on older drivers focuses on identifying modifications to vehicles or roadways that can improve the margin of safety for older persons. In contrast, the bulk of the research program detailed in NHTSA's 1993 "Traffic Safety Plan for Older Persons" focuses on modifying the actions of older drivers themselves, or of people who deal with older drivers, including friends and family, physicians, occupational therapists and other health-care providers, police, and driver-licensing officials. Specifically, this program will provide tools and procedures to a variety of groups to aid drivers in making safe choices about limiting their driving and to assist officials to take regulatory actions regarding drivers who do not make safe choices.

Toward this end, NHTSA has sponsored numerous research projects to lay the foundations for reaching this objective. Recent research has revealed several important patterns:

Older drivers have the fewest crashes per licensed driver of any age group. Their fatality rate based on miles traveled is as high as the youngest drivers, but they are considerably more likely to die in a crash than younger people.

Age itself is not indicative of driving problems. Driving problems are related to functional limitations that my occur at any age, though they become more likely as age increases beyond 75 years.

Most drivers adjust their driving to accommodate to their declining capabilities. They tend to stop driving after dark, avoid congested or high-speed roads and freeways, stay home in bad weather, and stick to familiar routes.

Driving problems appear to be concentrated among individuals who suffer from serious limiting conditions of which they are unaware. Of particular note are cognitive disorders, such as Alzheimer's Disease, and certain perceptual disorders involving object recognition in peripheral visual areas.

When older people do not drive, their ability to conduct normal activities—shopping, visiting friends, attending church—drops dramatically.

In addition to funding research directly, NHTSA's involvement with TRB's Committee on the Safety and Mobility of Older Persons has stimulated the interest of a wide range of geriatric researchers in traffic safety problems, thus generating much more information than would be possible by this agency alone.

## NORTH CAROLINA HIGHWAY SAFETY INFORMATION MANAGEMENT SYSTEM

Mr. CARR. Please provide an update on the status and accomplishments of the North Carolina highway safety information management system project.

[The information follows:]

NHTSA is funding a demonstration highway system information project, using global positioning technology, in North Carolina. The project is just getting underway with the purchase of necessary equipment. Under this project North Carolina will merge accident data with roadway, bridge, pavement, and emergency medical data; improve the accuracy of accident locations through the use of global positioning system (GPS) technology; and convert outdated computer software systems to newer database management systems.

### NEW JERSEY MODEL ACCIDENT RECORD SYSTEM

Mr. CARR. Also provide an update on the status and accomplishments of the New Jersey model accident record system.

[The information follows:]

New Jersey is implementing the first stages of its model state accident records automation project. The model system will create computerized accident files at the police agency level. The files will use digitized mapping to record accident locations accurately. Accident data on file will be accessible immediately by local and state users. New Jersey will develop a software package for local and state users to retrieve and analyze data from the files. After the demonstration, this software will be made available to other states and local agencies at no cost.

### ISTEA MANDATED SAFETY MANAGEMENT SYSTEM

Mr. CARR. What is the purpose of the safety management system mandated by ISTEA?

[The information follows:]

In ISTEA, Congress mandated that states implement six management systems—highway pavement, bridges, intermodal transportation facilities and systems, public transportation facilities and equipment, traffic congestion, and safety. The purpose of all of these systems is to ensure that states are allocating resources in the most cost effective manner.

### HIGHWAY SAFETY DATA BASE COORDINATION WITH FHWA

Mr. CARR. What activities is NHTSA conducting, alone and in conjunction with FHWA, to coordinate and integrate the various highway safety data bases?

[The information follows:]

NHTSA and FHWA coordinate extensively to assure that the crash data needs of both agencies are met and integrated in the most effective and efficient manner possible. Examples are:

The Trucks in Fatal Accidents (TIFA) study, combines FARS and motor carrier crash reports required by FHWA to provide a richer data source for understanding truck crashes involving a fatality.

NHTSA is providing funding to support FHWA's efforts to collect data on U.S. travel patterns in the Nationwide Personal Transportation Survey (NPTS), scheduled for 1995.

Both agencies support and participate in national committees, e.g., the National Safety Council's Traffic Records Committee and Transportation Research Board's Accident Records Committee, which promote the use and improvement of traffic records.

NHTSA and FHWA are cooperating in the development of the Safety Management System.

In 1991, FARS began collecting information on commercial driver license requirements for drivers involved in fatal crashes.

Through an interagency agreement with FHWA, NHTSA added 7,000 large truck crashes to data collection in the General Estimates System (GES) sample of 45,000 crashes per year, increasing the reliability of the truck crash estimates. GES also began collecting six new large truck data elements in 1992.

Mr. CARR. What are some of the barriers and practical problems in accomplishing this integration of data systems?

[The information follows:]

NHTSA and FHWA have been working extensively to coordinate and integrate data needs. Where either agency is responsible for the collection of the data, e.g., the Fatal Accident Reporting System or the General Estimates System, changes can be implemented in the upcoming data year. Integration of data needs is more difficult where neither agency is responsible for the directly collected data, i.e., much of the information needed is provided by state agencies on their police accident reporting forms. Once a change in the information needed to support a data program is identified, e.g., the FHWA's National Governor's Association Truck Data elements or NHTSA's Critical Automated Data Reporting Elements, states must be convinced that they need to add these data elements to their reporting forms. Then, they must actually implement the change. This process can be time consuming and costly on the part of the states. Overall, there are very few barriers that need to be overcome as NHTSA and FHWA staff have developed a very effective working relationship in this area.

Mr. CARR. Has NHTSA or the FHWA prepared a plan to determine how implementation of the ISTEA-mandated safety management system will be achieved?

[The information follows:]

NHTSA and FHWA are working together to assist states in implementing their safety management systems (SMS). On December 1, 1993, an interim final rule was published which specified general requirements covering all six of the mandated management systems and specific guidance covering each individual system; NHSTA and FHWA jointly developed the section on SMS.

In addition, the two agencies sponsored a National Workshop in January 1994, for state officials with responsibility for developing SMS in their states. The Workshop served to inform participants of the legislative and regulatory requirements for the SMS, discuss the current state-of-the-practice of SMS activities across the Nation, and discuss strategies for developing and implementing an effective SMS in each State. The agencies are developing a "good practices guide" to document and share effective state SMS implementation ideas. The best state SMS practices will also be highlighted in a technology sharing demonstration program. Additional regional and state meetings are planned, and training programs are being developed.

## TRAFFIC RECORDS SYSTEMS IMPROVEMENTS

Mr. CARR. In general, what improvements do states need to make in their traffic records systems?

[The information follows:]

Traditionally, the states' traffic records systems have been the foundation of state and national highway safety management. In recent years, states have made significant improvements to individual components of their traffic records systems. One such improvement has been in the area of data linkage. The agency has been working with 7 states to study the application of data automation and linkage technology through the Crash Outcome Data Evaluation System (CODES) project. The CODES project links traditional traffic records and medical outcome data to provide comprehensive insight into the health cost associated with highway crashes. CODES has the potential to provide more efficiency in the collection, storage and retrieval of information.

The advances in safety technology and the necessity of collecting more specific information have increased the importance of accurate and complete information. Therefore, evaluating state traffic records systems and making improvements that refine safety information is an on-going process. Traffic records systems can be improved by developing a common reference system for reports; making files accessible; reducing duplication of information; eliminating inaccurate data elements; reducing unreported crash information; reducing delays in data input; updating technology; and increasing analytical expertise.

## TRAFFIC RECORDS SYSTEMS GRANTS

Mr. CARR. Which states will receive grants in fiscal year 1994 to upgrade their traffic records systems and will these grants be one-time award?

[The information follows:]

Currently, the traffic records grant proposals are in the process of being evaluated. The awards are expected to be made on or about April 30, 1994. The grants will be one-time awards for developing a statewide strategic plan for improvements to a state's traffic records system.

Mr. CARR. What objectives and milestones will states be expected to achieve with the traffic records grants?

[The information follows:]

The primary objective of the traffic records grant assistance is to encourage each state to focus on its data systems as a mechanism for identifying safety problems. The grant provides assistance to: identify the state's requirements for safety information and determine the strengths and weaknesses of its traffic records system; develop a strategic plan for implementing improvements identified in the statewide safety information system audit; and identify technologies necessary to improve their safety information system. Additionally, each state is encouraged to consider the requirements and implications of the ISTEA, the adoption of uniform data elements (Critical Automated Data Reporting Elements), and the National Governor's Association (NGA) motor carrier data elements, as it considers improvements to its data systems.

The product of the grant program will be a comprehensive strategic plan for improving the state's safety information system that includes state-determined milestones. States will also be required to submit progress reports every 90 days that detail how they are progressing with their plan. A final report will be submitted at the conclusion of each state's grant.

## TRAFFIC RECORDS GRANTS—NHTSA/FHWA ALLOCATION

Mr. CARR. How much will be allocated by NHTSA and FHWA for traffic records grants to states in fiscal years 1994 and 1995?

[The information follows:]

NHTSA and FHWA have allocated $1.4 million in 1994 and $1.1 million in 1995, for traffic records grants to the states.

## PERSONAL COMPUTER DEMONSTRATIONS

Mr. CARR. Why is NHTSA conducting a demonstration of hand-held, pen-based personal computers for data collection and transmission by police and emergency medical agencies when this technology is already in use in some jurisdictions? What do you hope to learn from this demonstration?

[The information follows:]

We are not planning a demonstration of hand-held, pen-based personal computers, essentially due to the reasons stated in the question. Our original Small Business Innovative Research (SBIR) project to develop these hand-held computers was begun several years ago when the technology was in its infancy. Since that time, through private development, the technology has seen rapid growth, and there is no longer a need to demonstrate the benefits of such units. We do, however, plan to distribute a limited number of our units to selected police agencies for their use and evaluation, to determine how they compare to the current technology. This will be done through in-house personnel without contract funding, and will terminate our involvement in the development of these units.

## FATIGUED DRIVING

Mr. CARR. Driver fatigue is a significant cause of motor vehicle accidents. What research has NHTSA conducted concerning the dangers of driving while fatigued?

[The information follows:]

Agency accident data indicate that there are approximately 50,000 police-reported crashes annually in which driver drowsiness/fatigue is cited as a factor. Nearly 1,500 fatalities occur in these crashes.

The agency is sponsoring research to develop a vehicle-based capability for detecting drowsiness and fatigue. The envisioned system would take continuous measurements of driver performance and status to determine whether the driver is drowsy, and then provide a warning signal to alert the driver.

NHTSA has also provided financial support to the "Drive Alert, Arrive Alive" public information campaign in New York State.

Mr. CARR. What public information and awareness efforts are currently under way and planned with regard to educating the public about drowsy and fatigued driving?

[The information follows:]

The agency has provided financial support to a new public information campaign in New York State on the hazards of drowsiness during driving. The "Drive Alert, Arrive Alive" campaign has included radio spots and the distribution to the public of an informational flier containing safe driving sleep tips. This activity was initiated by NHTSA's Region II in coordination with the New York Governor's Traffic Safety Committee and the National Sleep Foundation. No other activities in this area are planned.

Mr. CARR. What potential countermeasures look promising to address the fatigued driver issue?

[The information follows:]

The agency is supporting research to develop a vehicle-based capability for unobtrusively monitoring driver alertness. The envisioned system would take continuous measurements of driver performance (e.g., steering movements, lane tracking) to determine whether the driver is drowsy, and then provide a warning to alert the driver. Research is also underway to develop devices for making direct psychophysiological measures of driver alertness.

Public information/education campaigns may also help to increase driver awareness of the risks of driving while drowsy and common-sense measures drivers can take. On the highway side, early data indicate that "rumble strips" embedded in the shoulder pavement along rural highways can reduce the incidence of "drift off road" crashes, the most common crash scenario associated with driver drowsiness/fatigue.

## CRASHWORTHINESS RESEARCH PROGRAM

Mr. CARR. The fiscal year 1995 request includes a reduction of $1.8 million, or 15 percent, for research on the crashworthiness of vehicles. Does this reduction reflect a philosophical shift in NHTSA's thinking about the value of such research in achieving future gains in traffic safety?

[The information follows:]

The reduction does not represent a philosophical shift in NHTSA's thinking about the value of research on the crashworthiness of vehicles. Significant progress has been made in improving crashworthiness and occupant protection of vehicles in the past 20 years. While costs were high early in the research and development cycle, more of the costs are being borne by the private sector as the technologies for these improvements mature. Additionally, the agency has been using cooperative research agreements to advance the state of the art of occupant protection systems. These agreements have allowed the agency to wisely leverage federal and private sector research resources.

Mr. CARR. Last year, NHTSA discussed the need for a balanced research program that focuses both on vehicle crashworthiness as well as crash worthiness. Considering the $10 million for IVHS research included in the FHWA budget request to be transferred to NHTSA, NHTSA's research program will be weighted two-thirds toward crash avoidance strategies (IVHS) and one-third toward crash worthiness. Would you comment on whether this reflects a balanced program and which emphasis is likely to yield the greatest safety payoff?

[The information follows:]

Over the past 20 years, the technology was available to make significant progress in improving the crashworthiness and occupant protection of motor vehicles, and during that time the budgets for crashworthiness greatly exceeded those for crash avoidance. Today, IVHS offers the opportunity to make significant gains in the crash avoidance area and the budgets reflect this. Early in the research and development cycle, research costs are higher. As the technologies mature, more of the costs are borne by the private sector as they develop and deploy improvements to motor vehicles. The crash avoidance program is today where the crashworthiness program was 20 years ago; crashworthiness is more mature than crash avoidance.

In order to continue to achieve reductions in the number of crashes and the fatalities, injuries, and societal costs that result, research is necessary in both crash avoidance and crashworthiness. NHTSA feels that both areas are likely to yield significant safety payoffs and that both areas should be pursued vigorously. No matter how successful the crash avoidance program is, crashes will occur and there is a need to provide as much protection as practicable so that occupants survive as many crashes as possible.

## RESEARCH BUDGET REQUEST—SUPPORT OF PRIORITY PLAN

Mr. CARR. How does your fiscal year 1995 research budget request support the 1992–1994 Priority Plan developed by the agency?

[The information follows:]

The research required by the NHTSA's Priority Plan is supported by the fiscal year 1995 research budget request.

The FY 1995 budget request for the Office of Crash Avoidance Research supports two major areas in the NHTSA Priority Plan. The National Advanced Driving Simulator (NADS) will develop a critical research capable of simulating realistic vehicle/driver interactions and environments, thereby allowing the conduct of driver-vehicle interaction experiments in crash-imminent situations that cannot be carried out today because they would place subjects in potentially hazardous situations. The IVHS program is directed at facilitating development and early deployment by industry of intelligent vehicle systems to aid drivers in avoiding crashes and at ensuring no loss of safety as these systems are incorporated into motor vehicles.

All active items related to crashworthiness in the 1992–94 Priority Plan are fully supported by the budget request. Particularly, research efforts will be continued for the support of the activities in improved frontal crash protection, rollover protection, door retention components, and fuel system integrity. The research has been completed for the activities in side impact protection, reduction of head injuries, and rear underride guards.

The recompetition of the NASS contract program was completed in October 1993, and the implementation is proceeding on schedule. This effort should help to improve injury data collection and coding quality. The CDS data form a unique data base for agency work in Crashworthiness, Rulemaking, and Crash Avoidance, including Intelligent Vehicle Highway System (IVHS) initiatives, and the evaluation of countermeasures to reduce occupant injuries. The GES data are utilized to identify trends in overall traffic safety and to add a national perspective to detailed analyses from other, more detailed data sources.

An important initiative in the State Data area is the Crash Outcome Data Evaluation System (CODES) and the Data Linkage Program. This effort will allow data for motor vehicle crash victims recorded in Emergency Medical Service (EMS) activities and hospital data systems to be matched with information found on the state's crash data system, resulting in an enhanced crash outcome data base. This linkage will enable states and NHTSA to develop statewide Crash Outcome Data Evaluation Systems (CODES) that can be used to study injury outcome and to evaluate highway safety programs.

## RESEARCH ACTIVITIES—INTERIOR HEAD AND ROLLOVER PROTECTION

Mr. CARR. Please describe the research activities under way in the areas of interior head protection and rollover protection and relate these activities to ongoing regulatory activity.

[The information follows:]

The research program supporting the upper interior head protection effort of the agency has been completed. The agency currently is reviewing its final rule for this regulatory activity.

The agency is conducting a research program to improve rollover crash survivability by preventing occupant ejection and by mitigating the severity of impacts that an occupant experiences during rollover. In the area of ejection prevention, research is investigating improved door latches and ejection resistant glazing. In the area of occupant impact mitigation, research is investigating improved interior padding, improved restraints, and improved roof support. These efforts directly support the agency's regulatory activities in rollover protection.

Longer range biomechanical research efforts are striving to develop better criteria to detect impact conditions that cause skull fracture and brain and neck injuries. Efforts are also underway to improve the instrumentation and test equipment that evaluate the safety performance of vehicles.

## RESEARCH ON DYNAMIC SIDE IMPACT CRASH STANDARD

Mr. CARR. How did the research and analysis program contribute to the development of the dynamic side impact crash standard for passenger cars and what are your contributions toward to development of dynamic side impact standards for light trucks and vans?

[The information follows:]

The research program supported all aspects of the development of the dynamic side impact crash standard for passenger cars. Specifically, research developed the moving deformable barrier and test procedure used in the standard. The research program developed the side impact dummy and associated injury criteria used in the standard. The research program evaluated baseline vehicle performance using the developed test procedures and devices. Finally, the research program developed and evaluated countermeasures to a variety of baseline vehicles that demonstrate the benefits that would be accrued by the standard.

The research program also contributed to the development of dynamic side impact standards for light trucks and vans. Research initiated a review of the crash data to determine how fatalities and injuries occur to occupants of light trucks and vans in side impact crashes. Based on this review, the research program developed several alternative test procedures that could be used for a dynamic side impact standard for light trucks and vans.

## SCHOOL BUS SAFETY AND CHILD RESTRAINTS RESEARCH

Mr. CARR. What research is underway in the areas of school bus safety and child restraints?

[The information follows:]

NHTSA recently completed a study demonstrating methods to increase use of safety seats using local police enforcement and public information efforts. The report on this project will be available by June 1994.

One of the agency's current studies will update our understanding of misuse of safety seats. This study will document the most prevalent types of misuse and seek the reasons for misuse in both behavioral and design areas. This study will be completed in the fall of 1995.

NHTSA's analyses of child fatality data revealed that the majority of fatalities involved residents of rural areas and small towns. Another of the agency's current studies will develop strategies for motivating increased use of safety seats among rural families and identify appropriate means to reach these families with safety messages. This project is scheduled for completion in the spring of 1995.

NHTSA is analyzing data from a national health survey reporting on where parents obtain safety seats, how they get information about the need for safety seats, and what kinds of instruction they receive on how to use them. This effort will be completed by the end of 1994.

Currently, a task is underway to address the need for upgrading the bench seat fixture used in the sled testing of child restraints to make the fixture more representative of current vehicle seat designs.

In the past year, tasks have been completed to evaluate the current standard and other child safety issues. This work has addressed child restraint/air bag interaction, belt positioning booster seats, lap/shoulder belt test procedure, and issues related to the current test procedures. Future work will continue to address issues related to child safety.

## PEDESTRIAN AND CYCLIST RESEARCH FUNDING

Mr. CARR. What amounts will support pedestrian and cyclist research under the fiscal year 1995 request?

[The information follows:]

The agency requested $1.4 million to support agency activities in school bus safety, child restraint systems, pedestrian and cyclist programs, and the elderly. The focus of these activities, however, will be on improved restraint concepts for children and on the special protection that may be helpful to the elderly. The fiscal year 1995 funding for pedestrian and cyclist research is to be determined.

Mr. CARR. How does this work differ from that conducted under the highway safety program within NHTSA and from pedestrian and cyclist research supported by FHWA?

[The information follows:]

This work specifically focuses on vehicle improvements that result in reducing fatalities and mitigating injuries in the event of a pedestrian or cyclist accident.

The highway traffic safety program within NHTSA focuses on educational activities and the promotion of helmet use by cyclists. The FHWA efforts focus on improving the roadside hardware, signalling, and markings to reduce the possibility of these accidents.

## OCCUPANT PROTECTION SYSTEMS—NEW DEVELOPMENTS

Mr. CARR. What new developments are on the horizon regarding improved air bag technology, and safety belt/air bag systems?

[The information follows:]

Volvo has announced that seat mounted side impact protection air bags will gradually be introduced in several Volvo models during model year 1995. Other domestic and foreign sources are developing side crash protection air bag systems which also may be offered in future cars.

Air bag folding designs for storage in air bag modules and their decorative protecting cover designs are being improved to reduce injuries to occupants during deployments.

most manufacturers will soon change from using multiple crush zone (near front of the car) crash sensors to use of a single solid state crash sensor located in the passenger compartment which utilizes sophisticated deployment decision algorithms to provide a timely air bag deployment decision.

Sensors and instruments within the passenger compartment to establish occupant status (size, position relative to air bag) are being developed to allow tailored, automatically adjusted air bag inflations best suited for the specific type of crash circumstances.

Both multiple sequential solid propellant ignitions of inflators and hybrid air bag inflators employing high pressure stored gases with supplementary pyrotechnics may soon be available for tailoring aggressiveness of air bag inflation in response to crash severity and occupant status information.

Alternatives to sodium azide based propellants for air bag inflators are nearing production application.

## AIR BAG SYSTEM IMPROVEMENTS—COOPERATIVE & RESEARCH GRANTS

Mr. CARR. What cooperative research grants have been awarded to develop improved air bag systems; to whom were the grants awarded; and what were the amounts of the awards?

[The information follows:]

| Grantee | Subject | Amount |
|---|---|---|
| Automotive Systems Laboratory, Inc | Select desired air bag performance improvements based on real world crash data and redesign systems accordingly. | 0.00 |

| Grantee | Subject | Amount |
|---|---|---|
| Hittite Microwave Corporation | Develop economical radar system to identify closing speed prior to frontal crash to be used in system which will allow earlier air bag deployment, especially in low speed crashes. | $60,000 |
| Romeo Engineering International, Inc | Anticipatory crash sensing and air bag deployment modification. | 30,000 |
| Romeo Engineering International, Inc | Review and improvement of air belt technology introduction. | 30,000 |

With regard to more basic research to understand human interaction with air bags, the agency awarded a cooperative research grant to the University of Heidelberg in 1989 to conduct human cadaver sled tests. The total award was for $505,332. A portion of this ongoing research is obtaining biomechanical data delineating the response of and the injury to the human thorax while being restrained by a combined air bag and 3-point belt restraint system. Also in 1989, the agency awarded a cooperative agreement to the University of Virginia for $1,799,620 and a cooperative agreement to the Medical College of Wisconsin for $1,382,328. Both of these institutions performed some sled tests in which human cadavers were restrained by air bags to study the response of the thorax and the extent of thoracic trauma.

## FRONTAL CRASH FATALITIES AND INJURIES

Mr. CARR. The increasing deployment of air bags in passenger cars appears to be contributing to reduced fatalities in frontal crashes, but increased lower extremity injuries. What work is under way to address this issue?

[The information follows:]

The agency considers that perhaps many or most of the moderate and serious lower extremity injuries were there all along. Prior to widespread use of the air bag, when an individual received both moderate and serious lower extremity injuries and critical and maximum thoracic/head trauma in the same automotive crash, epidemiology and emergency medical treatment focused on the critical and maximum trauma. Now that increased use of the air bag is ameliorating a portion of the critical and maximum thoracic/head trauma, crash studies are beginning to notice the disabling lower extremity injuries.

The agency is developing advanced dummy lower extremities that provide increased biofidelity and enhanced capability for injury assessment. These dummy lower extremities are being designed to assess trauma at the foot and ankle, the lower leg, the knee, the thigh, and the hip. Two prototype legs have been manufactured and are undergoing evaluation at government and industry laboratories.

To understand the injury mechanisms and provide risk functions for use in conjunction with the advanced dummy lower extremities, the agency is conducting experiments with human cadavers at two impact injury research centers. At the University of Virginia, the initial testing has begun to understand foot/ankle injury mechanisms. The Medical College of Wisconsin will soon begin an experimental investigation of hip trauma due to impact.

The agency is also sponsoring the University of Medicine and Dentistry of New Jersey and the Maryland Institute for Emergency Medical Services System to conduct a study on how current restraint systems, in particular air bags, affect lower extremity injury patterns.

In addition to these efforts, the agency is evaluating the potential of lower extremity injuries in air bag-equipped cars as part of its program for improved frontal crash protection. Vehicle-to-vehicle frontal offset crash tests have been conducted which demonstrate the potential of injury to the lower legs. The vehicles in these tests experienced intrusion into the toe board and lower dash area of the occupant compartment that was significantly greater than that observed in vehicle-to-barrier crash tests. In formulating countermeasures to mitigate these injuries, the agency is challenged with how to control the vehicle intrusion with increased frontal stiffness as balanced against making the vehicle too stiff (or aggressive) in its collisions with other vehicles.

## CRASHWORTHINESS RESEARCH—UNOBLIGATED BALANCE

Mr. CARR. What is the current unobligated balance for the crashworthiness research program?

[The information follows:]

The current unobligated balance for the crashworthiness research program is $7,696,570.

## CRASHWORTHINESS RESEARCH PROGRAM AWARDS

Mr. CARR. Please list each contract, cooperative agreement and grant award made under the crashworthiness research program in fiscal year 1993 and to date in fiscal year 1994.

[The information follows:]

| Record# | FY | CONTNUM | SUBSTR(PRTITLE,1,40) | CONTRNAME | OBL_AMT |
|---|---|---|---|---|---|
| 1 | 93 | DTNH22-93-C-07010 | AUTOMATED HIGH SPEED FILM DATA COLLECTION (NRD-10-2-07457) | CONCURRENT PROCESSING | 62614 |
| 2 | 93 | DTNH22-93-C-07027 | CALIBRATION OF HIGH SPEED CAMERA SYSTEM | NORTHWESTERN UNIVERSITY | 106782 |
| 3 | 93 | DTNH22-92-C-07068 | MOD#1 - RENEWAL/UPDATE OF MADYMO/MAPPK MODELING SOFTWARE LICENSE | EASI ENGINEERING | 76615 |
| 4 | 93 | DTNH22-93-C-07034 | OPERATION OF ZONE CENTER #1 FOR THE NASS SYSTEM | CALSPAN CORPORATION | 340517 |
| 5 | 93 | DTNH22-92-C-07058 | INCREMENTAL FUNDING- MAINTENANCE OF BIOMECHANICS DATA BASE | CONRAD TECHNOLOGIES, INC. | 425000 |
| 6 | 93 | DTNH22-93-C-07254 | ACCIDENT DATA ANALYSIS | ABACUS TECHNOLOGY CORP. | 133889 |
| 7 | 93 | DTNH22-88-C-07116 | ANALYTICAL SUPPORT | COMSIS CORPORATION | 29000 |
| 8 | 93 | DTNH22-93-D-07192 | COMPUTERIZED QA, QC & STATISTICAL SUPPORT SERVICES (P/B IN FY94) | CAPITAL CONSULTING CORP. | 100000 |
| 9 | 93 | DTNH22-92-D-07323 | TO# 2, MOD#1-DEVELOPMENT OF A PASS. VEHICLE FINITE ELEMENT MODEL | EASI ENGINEERING | 37773 |
| 10 | 93 | DTNH22-92-D-07323 | DUMMY NECK DESIGN SUPPORT - TO#3 | EASI ENGINEERING | 175500 |
| 11 | 93 | DTNH22-92-D-07092 | TO #2 - EXPERIMENTAL ASPECTS OF THE CHEST BAND | CONRAD TECHNOLOGIES, INC. | 104678 |
| 12 | 94 | DTNH22-90-D-07199 | ANALYTICAL SUPPORT FOR FRONTAL PROTECTION - TO #13 | ISSI | 98100 |
| 13 | 94 | DTNH22-92-D-07323 | DEVELOPMENT OF A SECONDARY DOOR LATCH TASK ORDER (NRD-01-3-07495) | EASI ENGINEERING INC. | 124575 |
| 14 | 93 | DTNH22-92-D-07064 | FUEL SYSTEM INTEGRITY UPGRADE - NASS CASE STUDY | ISSI | 51322 |
| 15 | 93 | DTNH22-91-D-03121 | MOD#5, T.O.#2-SUPPORT FOR MICROCOMPUTER INFORMATION CENTER AND LANS | INFORMATION MANAGEMENT CONSULTANTS (IMC) | 50666 |
| 16 | 94 | DTNH22-92-D-07323 | TO #5 - MODIFICATION OF NISSAN PICKUP ROOF STRUCTURE | EASI ENGINEERING INC. | 38632 |
| 17 | 93 | DTNH22-93-Y-07028 | BIOMECHANICAL BASIC RESEARCH | UNIVERSITY OF VIRGINIA | 156000 |
| 18 | 93 | DTNH22-93-Y-07256 | OCCUPANT PROTECTION SUPPORT | SIMULA INC. | 60000 |
| 19 | 93 | DTNH22-93-Y-07028 | TRAUMA RESEARCH AT UVA | UNIVERSITY OF VIRGINIA | 474000 |
| 20 | 94 | DTNH22-92-Y-07423 | C/WORTHINESS OF LIGHTWEIGHT AUTOMOTIVE STRUCTURES | WEST VIRGINIA UNIVERSITY | 500000 |
| 21 | 93 | DTNH22-93-Y-17028 | BIOMECHANICAL RESEARCH | MEDICAL COLLEGE OF WISCONSIN | 667479 |
| 22 | 94 | DTNH22-94-Y-07133 | EXPERIMENTAL CHARACTERISTICS OF CERVICAL IMPACT INJURY-B/MECHANICAL BASIC RES.(3-07028) | DUKE UNIVERSITY | 265000 |

## IMPACT INJURY RESEARCH LABORATORIES

Mr. CARR. NHTSA's 1992—1994 Priority Plan calls for the support of five university-based impact injury research laboratories and five such centers were supported in the fiscal year 1994 NHTSA budget. The fiscal year 1995 request, however, would support only four such centers. Is there a reason, other than a budgetary one, for reducing the number of centers supported? Why was this activity deemed a lower priority for continuing fiscal support by NHTSA?

[The information follows:]

Budgetary considerations were the main reason for reducing the number of impact injury research centers in fiscal year 1995. However, because the fiscal year 1994 award to the fifth center will occur late in the fiscal year, efforts at the fifth center will continue throughout the next fiscal year. Then, if additional resources are not allocated in the following fiscal year (1996), either efforts at one center will have to be terminated or all centers will have to operate at reduced levels of effort. NHTSA continues to consider the research being conducted at these institutions essential to its safety mission.

Mr. CARR. Where are the five impact injury research centers located; how much does each center currently receive from NHTSA, and what is the research focus of each center?

[The information follows:]

The answer is summarized in the table.

| Institution | Research topic | $1,000/year (average) |
|---|---|---|
| U. of Heidelberg | Front sled tests side sled tests | $250 |
| U. of Virginia | Front sled tests lower extremities | 550 |
| U. of Pennsylvania | Side sled tests | 550 |
| Medical College of Wisconsin | Side sled tests neck trauma skull fracture | 550 |
| VRTC—Ohio State University | Side sled tests | 100 |

Mr. CARR. What have been the accomplishments of the impact injury research centers to date?

[The information follows:]

The final rule for 49 CFR Parts 571 and 572 increased the allowable Hybrid III dummy chest deflection to 3 inches. This change to the final rule was necessitated by the fact that the agency did not have a sufficient number of tests with cadaver impacts to show a statistically significant link between injury, deflection of the human chest, and type of restraint system. At the issuance of the final rule, the agency announced its intention to obtain acceptable biomechanical data.

The impact injury research centers at the University of Heidelberg, the Medical College of Wisconsin, and the University of Virginia conducted 64 human cadaver sled tests with various restraint systems. The relationship between central chest deflection and thoracic trauma was examined and found to have a weak correlation. Additional analyses demonstrated that thoracic trauma may be assessed with far greater accuracy and certainty using thoracic deflection measurements from five locations on the chest. This new injury predictive process, coupled together with either the new more biofidelic dummy chest or a more highly instrumented Hybrid III chest, may prove robust enough to predict injuries accurately for either belt, air bag alone, or belt/bag restraint systems.

These preliminary results from the cadaver tests using both lap and shoulder belts and air bags appear to indicate that the stiffness and elasticity of the belt webbing currently used in most vehicles may need to be softened to take better advantage of the excellent force distribution of the air bag in frontal crashes.

## NADS ACQUISITION SCHEDULE

Mr. CARR. Please provide for the record an updated schedule for the NADS acquisition, similar to that shown on page 23 of the acquisition plan.

[The information follows:]

### NADS ACQUISITION MILESTONES

| Milestone | Start | Finish |
|---|---|---|
| Phase 1—Design Competition: | | |
| Design Competition | 01/27/94 | 02/21/95 |
| Post-Award Conference | 02/14/94 | 02/17/94 |
| Delivery of Iowa Software | 04/01/94 | 04/01/94 |
| In-Process Review (1 Day/Contractor) | 04/27/94 | 05/04/94 |
| System Design Review (2 Days/Contractor) | 07/26/94 | 08/04/94 |
| In-Process Review (1 Day/Contractor) | 10/26/94 | 11/02/94 |
| Preliminary Design Review (3 Days/Contractor) | 01/30/95 | 02/01/95 |
| NHTSA Acceptance of Deliverables | 01/21/95 | 02/21/95 |
| Proposal Evaluations | 03/01/95 | 06/01/95 |
| Source Selection | 07/01/95 | 07/01/95 |
| Phase II—System Development and Operational Support: | | |
| System Development | 07/01/95 | 06/30/98 |
| Post Award Conference | 07/15/95 | 07/16/95 |
| Critical Design Review | 05/21/96 | 05/26/96 |
| Notification of Intent for Operational Support Phase | 05/01/98 | 05/01/98 |
| NHTSA Acceptance of NADS | 06/30/98 | 06/30/98 |
| Operational Phase | 07/01/98 | 06/30/99 |

## NADS APPROPRIATIONS

Mr. CARR. Please provide a breakout of the appropriations provided to date for NADS and the estimated appropriations needed to support the next phases of the project for each fiscal year until project completion.

[The information follows:]

The appropriations, by fiscal year, provided for the NADS program to date are as follows: FY 1990—$2,951,000, FY 1991—$1,800,000, FY 1992—$0, FY 1993—$5,000,000, FY 1994—$0. Once the Phase I Design Contracts are completed, NHTSA will have an accurate estimate of the total NADS cost, as well as the required distribution of funds, by fiscal year, to complete the project. At present, the estimated appropriations, by fiscal year, required for the construction phase of the NADS are as follows: FY 1995—$2,000,000, FY 1996—$6,500,000, FY 1997—$5,000,000, FY 1998—$2,250,000.

## CRASH TEST DUMMY IMPROVEMENTS

Mr. CARR. Please update the subcommittee on your work in improving crash test dummies.

[The information follows:]

The following projects are being actively pursued in the crash test dummy area:

Evaluation of 5th- and 95th-percentile Hybrid III type dummies, and the development of detailed seating procedures for them;

Development of techniques for establishing neck angular position and neck torques, for application to potential neck injury criteria;

Investigation of the hip joint mobility of the Hybrid III dummy, in response to petitions received by the agency;

Development of new prototype lower extremity hardware, adaptable to the Hybrid III dummy, which incorporates injury assessment features relevant to ankle and foot injuries;

Development of advanced prototype thorax and abdomen hardware, which offers improved geometry, improved injury assessment capability, and better discrimination of seat belt and air bag loading patterns;

Development of an advanced neck prototype which controls head motion more realistically and which offers expanded neck injury assessment capability;

Development of procedures for standardization of materials used in dummy manufacture, for improved dummy response consistency;

Integration of neck load cell hardware into the 6-year-old child dummy, for improved injury assessment;

Development of new techniques for measuring the motion of dummy components during crash sequences.

### PREGNANT TEST DUMMY DEVELOPMENT

Mr. CARR. Recently, General Motors announced that it would undertake the development of a "pregnant" test dummy to improve the safety of pregnant women in highway accidents. Does NHTSA agree that there is a need for such a test dummy, and has NHTSA conducted any work in this area?

[The information follows:]

The agency believes that it is very important to understand the interactions between the various available restraint systems and different size occupants. For example, recent efforts in the agency's research program for improved frontal crash protection have focused, in part, on analyzing the protection afforded to different size occupants, such as the 5th percentile female and 95th percentile male Hybrid III dummies. General Motors announced the development of a "pregnant" dummy, which is a 5th percentile female with an insert that simulates a 7 month fetus. This development affords the agency an opportunity to evaluate restraints for that segment of the population. The agency is currently in the process of considering entering into a cooperative research effort to evaluate the "pregnant" dummy in various restraint systems.

### HIGHWAY TRAFFIC INJURY STUDIES

Mr. CARR. Why is NHTSA proposing to reduce support for highway traffic injury studies in fiscal year 1995?

[The information follows:]

The proposed budget for highway traffic injury studies for FY 1995 is less than the previous year because the 3-year effort at the Children's National Medical Center has been completed and requires no further funding. Additionally, because of budgetary considerations, the funding to the ongoing efforts at the University of Medicine and Dentistry of New Jersey, the Maryland Institute for Emergency Medical Services Systems (MIEMSS), and the Jackson Memorial Hospital has been reduced to a total of $500,000.

### RYDER TRAUMA CENTER STUDIES

Mr. CARR. What have been the results of the studies of injuries of restrained occupants in frontal crashes conducted by the Ryder Trauma Center in Miami, Florida?

[The information follows:]

Results of the studies of injuries to restrained occupants in frontal crashes conducted by the Ryder Trauma Center in Miami, Florida, are as follows:

This detailed study of crash injuries by an interdisciplinary team including trauma physicians, engineers, safety statisticians, and crash investigators is yielding valuable safety advances. The study involves periodic case reviews at NHTSA, with auto industry and other safety experts in attendance. This scientific interaction and participation has produced immediate technology transfer to those most able to apply the new knowledge. This work is improving the scientific understanding of injuries and their medical costs and consequences. Opportunities for improving the treatment of injuries already have been identified.

Discovery of a new injury pattern for drivers protected by air bags.

Development of a new "lift and look" triage aid to help in the proper diagnosis and treatment of drivers protected by air bags in serious crashes.

Publication of the NHTSA Research Note,"Detection of Internal Injuries in Drivers Protected by Air Bags" (attached), that will help save the lives of some people that are protected by air bags but dying in crashes presently at the rate of three people per day. This research will become increasingly important as this number is expected to increase to 14 deaths per day in the next 6 years as more people protected by air bags are in crashes.

U.S. Department
of Transportation
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# Research Note

August 1993

## Detection of Internal Injuries in Drivers Protected by Air Bags

**Louis V. Lombardo**
**Susan D. Ryan**

Early results from research being conducted for the National Highway Traffic Safety Administration at Jackson Memorial Hospital in Miami by a team of medical, engineering and crash investigators suggest the emergence of changing injury patterns in motor vehicle crashes in which an air bag has deployed. Emergency medical services (EMS), both prehospital and hospital personnel, as well as the public, could benefit by becoming aware of these changing injury patterns.

Prior to air bags, drivers involved in crashes often had visible injuries such as bleeding, facial lacerations, abrasions, bruises, and broken facial bones that were obvious to rescue personnel. Now, drivers protected by air bags and safety belts often do not have visible injuries.

The research team has found that among drivers protected by air bags, in some severe crashes, serious internal injuries may be present but not be externally apparent. As is the situation with so many cases of blunt trauma (regardless of restraint system) that EMS providers encounter, internal injuries often are survivable if detected and treated in time, but can be fatal if not detected and treated appropriately and promptly.

EMS personnel conducting initial injury assessments should not be deceived by the lack of external injury signs and symptoms customarily associated with crash injuries. The driver protected by an air bag may look fine and feel fine, but not be fine. This may be important even for drivers who are fully ambulatory and apparently uninjured at the crash scene.

To address this situation and increase the chances that these crash victims receive timely and appropriate emergency care, the research team has offered suggestions for improved internal injury detection. One "tell-tale" indicator of injury is deformation of the steering wheel. In the case of a motor vehicle crash in which an air bag has deployed, rescue personnel should **lift the deployed air bag** to look for steering wheel deformation. After removal of the occupant, rescue personnel can easily lift the deflated air bag out of the way and make a visual check of the steering wheel.

Thus, a quick "lift and look" under the air bag should be a part of the routine examination of the steering wheel. Any visible deformation of the steering wheel should be regarded as an indicator of potentially serious internal injury, and appropriate action should be taken.

Steering wheel deformation under the air bag should be used in triage decisionmaking as a supplementary, but not sole, indicator of the possibility of internal injuries. Since steering wheel deformation varies with differing interior design characteristics of vehicles, conditions of the crashes, and occupant kinematics, internal injuries may still be present whether or not the steering wheel has been deformed. The potential for internal injuries is also related to the age, size, and health status or physical condition of the occupant.

One of the findings of this research is the revalidation of the importance of the rapid application of EMS trauma triage criteria. Trauma triage criteria, including such current measures as the Glasgow Coma Score, are essential to providing the best possible lifesaving care to crash victims.

U.S. Department
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**National Highway
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## CHILDREN'S HOSPITAL STUDY

Mr. CARR. What have been the results of the studies of children involved in car crashes conducted by Childrens Hospital Center in Washington, D.C.?

[The information follows:]

The preliminary findings form the study indicate that, overall, the various child restraint systems covered by FMVSS 213 have generally performed well. Severe injuries usually occurred when children were either inappropriately restrained (i.e., the restraint used did not match that recommended for his or her weight category), or incorrectly restrained (the safety seats were not properly anchored to the vehicle or the safety belt and/or the safety seat harnesses were not correctly used). The study also indicated that young children in the age group of 4 to 7 years old (or weighing over 60 pounds) who have outgrown booster seats are not well restrained by lap/shoulder belts.

## HIGHWAY INJURY STUDIES—TRAUMA CENTERS

Mr. CARR. Please identify each of the trauma centers conducting highway injury studies, the amounts allocated, and the focus of each study for fiscal year 1994 and planned for fiscal year 1995.

[The information follows:]

The agency is currently sponsoring two highway traffic injury studies at three trauma centers. The first study is on "Injury, Causes and Costs of High Speed Car Crashes." The study is conducted by the University of Medicine and Dentistry of New Jersey (UMDNJ) and the Maryland Institute for Emergency Services Systems (MIEMSS). The FY 1994 funding levels for this study is $500,000; and the planned FY 1995 funding is $250,000. The focus of the study is on how current restraint systems covered by FMVSS 208 and 214, in particular air bags in frontal crashes and side impact safety systems, affect injury patterns in general and specifically in the lower extremities.

The second study is on "Motor Vehicle Impact Injury Mechanisms to Restrained Occupants in Frontal Crashes." The study is conducted by the Jackson Memorial Hospital. The FY 1994 funding and support is $375,000 with the FY 1995 funding planned at $250,000. The focus of the study is on injuries and injury mechanisms to restrained occupants of recent vintage cars in frontal crashes.

## CADAVER RESEARCH

Mr. CARR. Last year, several media accounts focused on the use of adult and child cadavers in research conducted at the University of Heidleberg in Germany. To what extent are cadavers used in research supported by NHTSA?

[The information follows:]

In 1994, the agency will fund five Impact Injury Research Centers that will use cadavers in their studies of the impact injury process. In past years, NHTSA research efforts have used approximately 30 cadavers per year. Since the 1994 research plan expands the number of NHTSA sponsored centers to five, the agency expects to conduct approximately 60 tests this year studying a variety of injury modes. These include skull fracture, neck injuries, thoracic injuries in both frontal and side impact, and injuries to the lower extremities.

Mr. CARR. What protocols and procedures are in place to ensure that cadavers are used with the permission and consent of the families involved?

[The information follows:]

The agency has specific requirements which it follows during the initiation, award, and conduct of research efforts that use cadaveric specimens: NHTSA Orders 700–1, –3, and –4. These Orders require that an internal "Human Use Review Panel" oversee and assure that all protocol and procedures within the Orders are complied with. These orders require, as with human subject testing, that the participating research institution designate and convene an appropriately constituted Internal Review Board (IRB) whose membership profile is dictated by HHS Regulations. This IRB must review and certify to NHTSA that the terms and conditions of all NHTSA Orders are complied with. With respect to obtaining consent of the families involved, NHTSA's Order states, "After a proposal is approved by the institutional review board reasonable effort should be made by the contractor to obtain next-of-kin approval for the research that is considered by the review board to be beyond the normal scope of teaching and research within the context of the appropriate local statutes." It has been NHTSA's experience and NHTSA's contractors' general policy that if at any time the family of the deceased wishes that such research not be conducted, even if the donor signed a proper donation form, their wishes are complied with.

Mr. CARR. How important is the use of human cadavers in the development of crash test dummies and in biomechanics research? What alternatives are available to the use of human cadavers?

[The information follows:]

NHTSA considers the use of human cadavers to be an essential component in its efforts to understand the human impact injury process and promulgate performance regulations that effect impact safety in vehicles. This is because to correctly control the motions and forces applied to an occupant to minimize and/or eliminate injury, NHTSA must have knowledge of these factors in both injurious and noninjurious conditions. At this point in time, the cadaver is the most reasonable surrogate of the living human to obtain this knowledge. NHTSA is not alone in this judgment. In a report to NHTSA in 1978, the National Academy of Sciences addressed the issue of using cadaveric specimens and recommended, "To provide a data base for the development of anthropomorphic dummies and injury criteria, the use of human cadavers is necessary and should be continued." It furthermore recommended that, "Human cadaveric studies are deemed necessary in vehicle crash tests for which current dummies are insufficient, e.g., to evaluate the data on such safety innovations as new restraint systems which have been developed in vehicle modification research programs."

## IVHS PROGRAM

Mr. CARR. Including the $10 million in IVHS funding requested through the FHWA, funding for NHTSA's fiscal year 1995 Intelligent Vehicle Highway Program would be nearly double the amount available to NHTSA just two years ago. What program accomplishments can you point to that would justify this remarkable increase?

[The information follows:]

The NHTSA IVHS program has made significant progress in implementing the agency's five-element program to develop needed research tools and utilize these tools to develop improved understanding of driver and vehicle performance; characterize specific crash problems, through intensive analysis of agency accident data bases, to ensure countermeasures match real problems; develop engineering and human factors performance guidelines for collision avoidance systems; work with industry to accelerate development and early deployment of such systems; and work with FHWA to ensure that safety is not compromised as mobility or productivity enhancing systems are introduced into motor vehicles.

In fiscal year 1993, NHTSA initiated 14 new major multi-year contracts/cooperative agreements, including the initial four performance guideline development contracts worth $16.5 million. Typically, as research moves from the analytical portions of the contract to the development of test beds and extensive full scale testing, increased funding is required in the later years of the contract. The agency also expects to initiate additional performance specification development efforts to address other crash types. Likewise, when needed research tools now under development have been validated, there is a need to build multiple copies and utilize them to create comprehensive data bases. Compilation of such needed data bases requires increased funding. Also, there is a need to expand the cooperative agreements with industry if we are to accelerate the development and early deployment of collision avoidance systems, to work with the industry in evaluating collision avoidance systems as they become available, and to continue to support FHWA with regard to the safety evaluation of operational tests/automated highway systems. The increased budgets simply represent the funds required to fund the out years of already initiated contracts and to maintain the scheduled implementation of the NHTSA IVHS program outlined to Congress in 1992.

THe funding from previous years is beginning to bear fruit as evidenced by recent accomplishments such as the completed evaluation of electronic-based rear and side object detection systems for commercial vehicles, preliminary guidelines for effective warning system design, and sponsorship, with IVHS America, of a well-attended workshop on collision avoidance systems.

## IVHS PROGRAM PLAN

Mr. CARR. Please discuss the status of each major objective identified for completion by the end of calendar 1993 under the IVHS program plan on page 34 in NHTSA's 1992–1994 Priority Plan.

[The information follows:]

Publish initial identification of crash causal factors and the functional requirements for intelligent vehicle crash avoidance countermeasures—Winter 1992–1993.

A series of reports have been published (or are currently being published) characterizing the following crash types: rear-end, backing, and lane change. In review are reports addressing single-vehicle run-off-road and intersection crashes. For each crash type, two reports are prepared—a problem size assessment and statistical description and a countermeasure assessment.

Conduct a study evaluating near object detection systems that are for installation on commercial motor vehicles for a report to Congress—1993.

A report titled "A Study of Commercial Motor Vehicle Electronic-Based Rear and Side Object Detection Systems" was forwarded to Congress on February 8, 1994.

Evaluate the level of safety of Departmental operational tests—1993–1994.

NHTSA continues to work with FHWA to ensure that systems for improving mobility and productivity do not degrade motor vehicle safety. The agency is currently involved in the safety evaluation of the TravTek, TravelAid, ADVANCE, and FastTrac operational tests.

Develop performance specifications and evaluate the performance, reliability, failure modes, consequences, and costs associated with the most promising crash avoidance techniques—1993–1994.

In FY 1993, NHTSA awarded four multi-year contracts worth $16.5 million to develop performance guidelines for collision avoidance systems to address the following crash types: run-off-road, rear-end, intersection, and backing, merging and lane change. The agency initiated work with regard to night vision enhancement systems in early FY 1994.

Quantify critical driver sensory, perceptual, decision-making and motor capabilities with regard to driver workload and response to warning systems—1993.

The workload contract is currently refining evaluation protocols to assess driver workload associated with various in-cab devices, including emerging high-technology systems. Baseline data collection on existing in-cab devices is beginning. The final set of recommended evaluation protocols are scheduled to be available in early 1995.

Work continues to identify requirements for effective in-vehicle warning system design. A draft guideline document has been completed.

Develop evaluation protocols for measuring a driver's ability to use IVHS systems and for the overall safety performance of the driver-vehicle-roadway system—1993.

The "workload' and "warning system" and "the safety evaluation of operational tests'" efforts discussed above support achievement of this objective.

## IVHS—DRIVER PERFORMANCE

Mr. CARR. What have you learned about driver performance capabilities and limitations, particularly with regard to older drivers, that has relevance for the deployment of IVHS vehicle based technologies?

[The information follows:]

The NHTSA IVHS Plan emphasizes the importance of IVHS designs that are compatible with the full range of driver capabilities, including those of older drivers. New designs and components (including IVHS devices) which change the driver-vehicle interface have the potential to enhance or degrade driver performance. NHTSA's IVHS research program will develop and utilize new research methods (e.g., advanced simulation) to gather basic data on driver performance, including driver reaction times and accuracy of driver responses under various crash threat and warning situations.

Available literature indicates that older persons are more likely to be deficient in any or all of the four basic "phases" of the driving task: seeing, recognizing, deciding, and acting. These limitations may be targets of opportunity for crash reduction through the use of IVHS collision avoidance systems. On the other hand, the same limitations may make it difficult for older drivers to use IVHS devices successfully. Agency IVHS research will address these questions.

NHTSA initiated a project last fiscal year to assess older driver crash avoidance research needs. The project will also identify vehicle design practices, including IVHS crash avoidance countermeasures, likely to affect the driving safety performance of older drivers.

Mr. CARR. What has NHTSA learned about vehicle cues and feedback needed by drivers to control the vehicle, and how is this information being incorporated into your IVHS program?

[The information follows:]

Recognizing the potential importance of vehicle cues and feedback to driver performance and safety, NHTSA has planned research that will focus on these and related issues. The research results will support the evaluation and design of advanced IVHS technologies which have the potential to modify or eliminate convential feedback cues to the driver, e.g., drive-by-wire, steer-by-wire, and adaptive suspension systems. The planned initial project to address this important topic was not awarded in fiscal year 1993 as anticipated.

## NEAR-OBSTACLE DETECTION TECHNOLOGIES

Mr. CARR. What have been the results of research funded in fiscal year 1993 on the use of near-obstacle detection technologies in improving the driving performance of tractor trailer drivers, and the safety implications of using in-vehicle text communications devices on heavy trucks?

[The information follows:]

In response to Section 6057 of the Intermodal Surface Transportation Act (ISTEA) of 1991, the agency published a congressional report in December 1993 titled, "A Study of Commercial Motor Vehicle Electronics-Based Rear and Side Object Detection Systems." The study concluded that, although these devices offer significant promise for safety benefits, more work is needed to refine their performance and design in order to achieve their safety potential. Separately, the agency is developing a method for evaluating the effects of any increased workload that might result from use of in-vehicle advanced technology communications and warning systems that employ visual and/or auditory driver displays. Text communications devices are being evaluated as part of the project. This research is scheduled to be completed in spring 1995.

## IVHS—COOPERATIVE AGREEMENTS

Mr. CARR. What cooperative agreements have been signed with private industry to foster early deployment of promising IVHS technologies? Please indicate the amounts associated with each agreement and identify the industry partner.

[The information follows:]

The agency has recently entered into three cooperative agreements and expects to finalize two additional cooperative agreements within the next month. The three that have been initiated are:

A project to demonstrate the feasibility of automatic braking on heavy vehicles with Eaton Corporation for $451,000.

A project to study problems of target acquisition when using radar systems with the Environmental Research Institute of Michigan and TRW for $900,000.

A project to study vehicle-based lane detection systems with Rockwell International for $415,000.

The other two projects will address:

Human factors aspects of intelligent cruise control systems

Forward-looking crash avoidance systems

## IVHS—PHASE I DEVELOPMENT

Mr. CARR. Please describe the results of the Phase I development of performance specifications for rear end, intersection, road departure, lane change, merging and backing countermeasures.

[The information follows:]

Contracts/interagency agreements to perform these four projects were finalized between May and September of 1993. The first phase of these efforts is scheduled to completed in 12–15 months. The first task in each project is a thorough analysis of data from collision files. This task includes a requirement to analyze the detailed reports for approximately 200 cases. A second task in each project is to establish functional goals for collision avoidance systems. These functional goals will be based on the detailed collision analysis. In the third task, available systems, if any, will be tested to determine their performance relative to the functional goals which will have been established in the second task. The last task in the first phase of each project is to do a thorough analysis of the performance that systems will have to provide to be effective in helping avoid collisions. THe primary outcome from the first phase of these projects will be the development of preliminary performance specifications for collision avoidance systems. Preliminary results from the first task in each project have shown that the detailed analysis of collision case files can provide meaningful insight into pre-crash conditions. Work on these tasks is continuing and interim reports will be completed later this year.

## IVHS—ALLOCATION FOR PERFORMANCE SPECIFICATIONS

Mr. CARR. Including funding provided through the FHWA, how much will be allocated to the development of performance specifications during fiscal year 1994 and what is your schedule for obligating these funds?

[The information follows:]

The agency plans to allocate $4.1 million to the development of performance specifications during FY 1994. The performance specification projects are multi-year and this funding represents an increment that will cover the work done during this period of time. Approximately half of the money has already been committed. The agency anticipates that the remainder of the funds will be committed before the end of the fiscal year.

## IVHS—PHASE II OUT-YEAR FUNDING REQUIREMENTS

Mr. CARR. What are the out-year (fiscal years 1996 through 1998) funding requirements for the Phase II performance specification work?

[The information follows:]

The agency currently has four major projects to develop performance specifications for collision avoidance systems. Funding for these contracts is included in budgets for fiscal years 1993, 1994, 1995, and 1996. One of the projects will be completed in 1995 and the other three projects are expected to need a total of $3.4 million during FY 1996. In addition to the four types of collision which are addressed by these projects, the agency anticipates the need to initiate projects which address other types of collision. As system concepts mature, there will also be a need for agency-involvement through cooperative agreements and operational tests. Decisions on details of programs for the outyears of 1996 and beyond will be based on the outcome of these initial projects, status of product development, and other relevant information.

## IVHS—AUTOMATIC EMS RESPONSE SYSTEM

Mr. CARR. NHTSA plans to commit over $8.0 million in fiscal years 1994 and 1995 on a field test of a communications system for automatic EMS response following a crash. Please describe in detail your plans for the operational test of this concept, including location of the test, participants, how the test will be evaluated, and out-year funding requirements.

[The information follows:]

The agency initially solicited proposals for a collision notification operational test in the spring of 1993 as part of the Department's initial request for IVHS operation test proposals. Two proposals were received and neither of them was judged to be technically adequate. To help potential partners overcome this lack of preparedness, the agency initiated a 1-year project to review the applicability of IVHS technology to this problem and also to develop a knowledge-base of technologies (such as sensors, navigation equipment, and communications equipment) for the in-vehicle part of collision notification systems. With this new foundation available, the agency is planning to include this operational test in a departmental notice which is expected to be published within the next 2 months and which will request proposals for agreements to establish operational tests in a number of IVHS program areas. Details of the operational test, including location and participants, will not be determined until the agency has selected a winning proposal. The proposal evaluation will take into account the proposed location, number of vehicles, and test area characteristics (i.e. rural vs. urban). At this time, it is not anticipated that out-year funding beyond the $8 million will be needed for this operational test.

### IVHS—FHWA ROLE

Mr. CARR. In fiscal year 1995, more than half of the funding for NHTSA's IVHS program would be transferred from FHWA. What, specifically, is FHWA's role in the development of performance specifications and countermeasures?

[The information follows:]

The technical management and direction of the performance specification projects is provided by NHTSA. FHWA staff served on technical evaluation panels for selection of NHTSA contract support and continue to participate in project reviews. This participation provides a basis for integration of results into relevant FHWA programs. The NHTSA performance specification projects will provide a key element in establishing the foundation for the automated vehicle highway prototype demonstration (AHS). The AHS program, which is managed by FHWA, will include the extension of applicable collision avoidance techniques and system concepts from the NHTSA projects into systems which can provide fully automated travel.

Mr. CARR. What are the benefits of providing partial funding for these activities through FHWA?

[The information follows:]

The NHTSA projects funded within the FHWA budget represent projects of mutual interest to the two agencies. FHWA includes funding for NHTSA in their budget to ensure that NHTSA vehicle and system safety projects critical to the success of FHWA operational tests and the automated highway system initiative are adequately supported.

### COLLABORATIVE PROJECTS WITH FHWA

Mr. CARR. Please identify any ongoing collaborative projects conducted with the FHWA, the Department of Defense, and the U.S. auto industry research cooperatives and the amounts associated with each project.

[The information follows:]

The agency currently has six collaborative projects with FHWA. They are:

Effects of In-vehicle Displays on Driver Performance, being performed by the University of Michigan Transportation Research Institute; NHTSA funding: $250,000.

Evaluation of the TravTek Operational Test performed by Science Applications International Corporation; NHTSA funding: $450,000.

Evaluation of the TravelAid Operational Test performed by the Washington State Transportation Center (TRAC); NHTSA funding: $250,000.

Evaluation of the ADVANCE Operational Test performed by the Volpe National Transportation Systems Center (VNTSC); NHTSA funding: $1,500,000.

Establish the National Crash Analysis Center at George Washington University. The Center will conduct research and assist FHWA and NHTSA managers in resolving highway transportation safety issues. NHTSA funding: $1,177,866.

Utilize the Lawrence Livermore National Laboratory expertise for developing advance computer models to evaluate roadside hardware, vehicle crashworthiness, and occupant protection during vehicle crashes. NHTSA funding: $440,000.

The agency also has the following two collaborative agreements with the Department of Defense:

Project to develop performance guidelines for lane-change, merge and backing collision avoidance systems with the Air Force Logistics Command performed by TRW, Inc., NHTSA funding: $3 million.

Project to develop a knowledge base for collision notification systems with the Space and Naval Warfare Systems Command of the U.S. Navy performed by the Applied Physics Laboratory of Johns Hopkins University; NHTSA funding: $380,000.

The agency has one project with the National Aeronautics and Space Administration:

Needs Analysis for a Variable Dynamics Test Vehicle, performed by the Jet Propulsion Laboratory of the California Institute of Technology, NHTSA funding: $359,000.

The agency has no collaborative projects with the U.S. Auto Industry Research Cooperatives.

## TRAVTEK SYSTEM

Mr. CARR. What are the results of your safety evaluation of the TravTek system?

[The information follows:]

The analysis of data from the TravTek operational test has not yet been completed. Preliminary analysis suggests that the collision rate of the test vehicles was not different than the national average. The preliminary analysis also indicates that visual turn-by-turn instructions with voice backup results in the safest driving performance relative to other driving conditions (e.g., moving map displays without voice backup); and that the level of safety was not the same for all display configurations. Finally, the preliminary analysis of data from questionnaires suggests that drivers believed they had fewer close-calls with the TravTek system than with their own vehicle. However, a subset of drivers perceived that some of the close-calls may have been related to use of the TravTek system.

## IVHS—OPERATIONAL TESTS

Mr. CARR. What other IVHS operational tests have been completed and evaluated for their safety implications, and what were the results?

[The information follows:]

No operational tests other than TravTek have been completed and evaluated for their safety implications.

## IVHS ACTIVITIES

Mr. CARR. Please provide a detailed breakdown of your IVHS activities for fiscal years 1993 and 1994. Please also provide corresponding funding amounts and contractors for each activity.

[The information follows:]

A detailed breakdown of activities during fiscal years 1993 and 1994 is shown in the attached table. For awarded contracts and interagency agreements, the contractor is identified and the FY 1993 and/or FY 1994 funding is shown. For projects where contract award is expected in FY 1994 either the budgeted FY 1994 funding is shown (where contract negotiations are nearly complete) or an asterisk appears (where funding amounts are still procurement sensitive).

In addition to contractor support, in-house DOT and NHTSA organizations provide significant support to the agency's IVHS program. The Volpe National Transportation Systems Center is providing support in the areas of technology assessment, analysis of crash causal factors, and safety evaluations. The Vehicle Research and Test Center is providing support in the areas of full scale testing, evaluation of IVHS hardware, and computer modeling.

| PROJECT | FY'93 ($K) | FY'94 ($K) |
|---|---|---|
| 1. Portable Data Acquisition System for Crash Avoidance Research (Oak Ridge National Laboratory) | 371 | 234 |
| 2. Quantitative Characterization of Vehicle Motion Environment (University of Michigan Transportation Research Institute) | 1000 | -- |
| 3. Instrumented Testbed Vehicle (JPL) | 359 | * |
| 4. Crash Avoidance and the Older Driver (Battelle/Catholic University) | 125 | * |
| 5. Vehicle Cues and Feedback Needed by Drivers (University of Michigan Transportation Research Institute) | -- | 150 |
| 6. In-Vehicle Crash Avoidance Warning Systems: Human Factors Consideration (COMSIS Inc.) | 112 | -- |
| 7. Driver Workload Assessment (Battelle) | 250 | 201 |
| 8. Driver Visibility Requirements (KETRON['93], Scientex['94]) | 65 | 250 |
| 9. Performance Specifications: Countermeasures Against Lane Change, Merging, and Backing Collisions (Interagency Agreement with U.S. Air Force). | 1200 | 900 |
| 10. Performance Specifications: Countermeasures Against Rear-End Collisions (Frontier Engineering) | 1400 | 692 |
| 11. Performance Specifications: Countermeasures Against Intersection Collision (CALSPAN) | 826 | 1100 |
| 12. Performance Specifications: Countermeasures Against Roadway Departure Collisions (Carnegie Mellon University) | 1391 | 1000 |
| 13. Performance Specifications: Vision Enhancement Systems for Nighttime and Inclement Weather (Carnegie Mellon Research Institute) | -- | 100 |
| 14. Performance Specifications: Systems to Enhance Emergency Medical Service Response (Interagency Agreement with U.S. Navy) | 300 | 80 |
| 15. Safety Evaluation of the TravTek Operational Test (Science Applications International Corporation) | 200 | -- |
| 16. Safety Evaluation of the ADVANCE Operational Test | 500 | 1500 |
| 17. Safety Evaluation of the TravelAid Operational Test (Washington State Transportation Center) | -- | -- |
| 18. Support for Problem Definition and Operational Test Evaluation (Battelle/CALSPAN) | 1000 | 150 |
| 19. Cooperative Agreement to Assess IVHS-Induced Electromagnetic Radiation Hazard (Millitech) | 100 | -- |
| 20. IVHS America Workshop on Collision Avoidance | 50 | -- |

| PROJECT | FY'93 ($K) | FY'94 ($K) |
|---|---|---|
| 21. Standardized Driving Simulation Tasks and Scenarios (Interagency Agreement with University Iowa) | 400 | -- |
| 22. IVHS-IDEA (Transportation Research Board) | 500 | 500 |
| 23. Cooperative Agreements with Industry (EATON) - Automatic Braking, Heavy Vehicles | -- | 299 |
| 24. Cooperative Agreements with Industry - Human Factors Aspects of Intelligent Cruise Control | -- | * |
| 25. Cooperative Agreements with Industry (ROCKWELL) - Lane Detection | -- | 205 |
| 26. Cooperative Agreements with Industry - Forward Crash Avoidance Systems | -- | * |
| 27. Cooperative Agreements with Industry (ERIM/TRW) - Forward Looking Automatic Radar Sensors | -- | 300 |
| 28. Vehicle Forward Lighting (TNO Netherlands, Johns Hopkins Applied Physics Lab.) | -- | 225 |
| 29. Rear Lighting/Signalling (Battelle) | 125 | 100 |
| 30. Automatic Collision Notification Operational Test | -- | 3000 |
| 31. Commercial Vehicle Communication and Powering | -- | * |
| 32. A Bridging Analysis for Estimating the Benefit of Active Safety Technologies (UMTRI) | 2.5 | 198 |

## IVHS PROGRAM FUNDING

Mr. CARR. Please identify the annual appropriations, obligated balance, and unobligated balance (including funds provided through FHWA) for NHTSA's IVHS program for each of fiscal years 1990 through 1994.

[The information follows:]

[Dollars in thousands]

| Fiscal year | Annual appropriation | Amount obligated | Amount unobligated |
|---|---|---|---|
| 1990 | 0 | 0 | 0 |
| 1991 | $2,250 | $2,250 | 0 |
| 1992 | 7,500 | 4,550 | $2,950 |
| 1993 | 9,024 | 11,974 | 0 |
| 1994 | 14,500 | [1] 14,500 | [1] 0 |

[1] Estimated.

## IVHS STAFFING INCREASE

Mr. CARR. Why are two additional full-time equivalents being requested for the fiscal year 1995 IVHS program? How will these positions be used?

[The information follows:]

The two full-time equivalents requested in fiscal year 1995—one engineering position and one human factors position—for the Crash Avoidance Research Program would support the agency's increasing participation in cooperative agreements with industrial partners aimed at accelerating the development and early deployment of IVHS-based collision avoidance systems and allow the agency to provide the needed vehicle engineering, system safety, and human factors support for the Department's Automated Highway System Program.

Mr. CARR. What is the current full-time equivalent staffing complement for IVHS activities?

[The information follows:]

The Office of Crash Avoidance Research currently has 12 full-time equivalent staff dedicated to IVHS.

## NADS FUNDING

Mr. CARR. What is the current unobligated balance of NADS appropriations and when do you expect these funds to be obligated?

[The information follows:]

The current unobligated balance of NADS appropriations is $3,504,974. NHTSA will obligate an additional $409,000 in fiscal year 1994 for Project Office support. The remaining balance of $3,095,974 will be obligated in fiscal year 1995.

## NADS: PROJECTS AND COSTS

Mr. CARR. Please provide an itemized list of NADS-related project administrative and project costs for fiscal year 1993, estimated for fiscal year 1994, and projected for fiscal year 1995.

[The information follows:]

In fiscal year 1993, the total NADS project-related costs were as follows:

| | |
|---|---|
| Project Office Support | $363,932 |
| Iowa Management Support | 184,000 |

| | |
|---|---|
| Iowa Technical Support | 850,000 |
| Total | 1,397,932 |

The estimated total NADS project costs for fiscal year 1994 are as follows:

| | |
|---|---|
| Project Office Support | 626,500 |
| Iowa Management Support | 310,000 |
| Iowa Technical Support | 650,000 |
| Phase I Design Contracts | 2,500,000 |
| Total | 4,086,500 |

The projected NADS total expenditures for fiscal year 1995 are as follows:

| | |
|---|---|
| Project Office Support | 409,000 |
| Iowa Management Support | 125,000 |
| Phase II Construction Contract | 4,561,974 |
| Total | 5,095,974 |

### NADS: TSARC REVIEW

Mr. CARR. What reviews of the NADS project by the Transportation Systems Acquisition Review Council (TSARC) are scheduled during fiscal year 1994 and planned for fiscal year 1995?

[The information follows:]

No additional TSARC reviews of the NADS project are scheduled for fiscal year 1994. The TSARC will review the NADS project in fiscal year 1995 when NHTSA seeks its approval to proceed with the Phase II construction of the NADS.

### CRASH AVOIDANCE RESEARCH

Mr. CARR. The fiscal year 1995 request proposed to reduce crash avoidance research related to heavy vehicles by about half. What is the rationale for the proposed reduction?

[The information follows:]

In the past few years, a large number of significant agency rulemaking actions based on research conducted under the heavy vehicle research program have either been initiated or completed; notably conspicuity enhancement, braking performance (stopping distance and handling/stability while braking), truck occupant restraint systems, and rear underride protection systems. Work continues in these areas, at a level commensurate with the stage of development of regulations on these subjects. Additionally, work is ongoing within the agency's Intelligent Vehicle Highway Systems (IVHS) program that supports heavy truck safety objectives, despite the fact they are not included in the heavy truck budget line item. The agency is in the process of redefining near-term and longer-range goals and objectives for the heavy truck research program that are responsive to current issues and concerns, notably the opportunity to further improve truck safety through advances in human factors and the use of advanced technology collision avoidance systems. The agency envisions the new strategic plan resulting from this process will, like previous plans the agency developed for this program, provide a rationale for new heavy truck safety initiatives.

### HEAVY VEHICLE RESEARCH

Mr. CARR. How does NHTSA's heavy vehicle research program differ from the commercial vehicle safety research program conducted by the Office of Motor Carriers in FHWA?

[The information follows:]

NHTSA Conducts research in support of Federal Motor Vehicle Safety Standards for newly-manufactured heavy vehicles. These safety standards are related to the collision avoidance and crashworthiness capabilities of vehicles. NHTSA also collects heavy vehicle accident data and performs analyses on these to identify prevalent accident factors or patterns. The Office of Motor Carriers (OMC) conducts research in support of the Federal Motor Safety Regulations which focus on various operational and maintenance aspects of vehicles engaged in interstate commerce, such as motor carrier safety performance, commercial driver qualifications, and safety inspection of in-service vehicles.

## SPLASH AND SPRAY SUPPRESSION DEVICE REPORT

Mr. CARR. Please discuss NHTSA's findings in your report to the Appropriations Committee on the status of recent technological progress in the design and testing of splash and spray suppression devices and NHTSA's view on the need for regulation in this area?

[The information follows:]

The NHTSA report on the status of recent technological progress in the design and testing of splash and spray suppression devices for heavy trucks was transmitted to Congress on March 8, 1994. That report found that there is no evidence that truck splash and spray is a significant safety problem, in terms of number of crashes or number of crash injuries. In addition, the report noted that no technology has yet come along that has been shown to improve visibility for drivers by reducing significantly the splash and spray generated by most large trucks. Further, truck manufacturers are trying to reduce splash and spray from their trucks (primarily by aerodynamic improvements) even though there is no regulation that requires them to do so. Given these factors, and the number of other research and rulemaking projects the agency currently has underway, NHTSA announced in the report to Congress that the agency has no plans to initiate rulemaking in the area of heavy truck splash and spray suppression.

## NATIONAL ACCIDENT SAMPLING SYSTEM (NASS) PROGRAM

Mr. CARR. You are proposing an 11 percent reduction in the fiscal year 1995 estimate for the National Accident Sampling System. What will be the impact of reducing the number of crashes investigated in NASS–CDS by 1,000 crashes, or 18 percent, and the number of crashes investigated in NASS–GES by 10,000, or 25 percent?

[The information follows:]

While the NASS system will continue to provide needed data, the reductions will affect their overall usefulness and the magnitude of the sampling errors. The NASS Crashworthiness Data System (CDS) is used by the agency for vehicle-occupant crashworthiness research and rulemaking, consumer information programs on occupant protection, and the definition of precrash event variables for the Intelligent Vehicle Highway System (IVHS) specifications. The 18 percent reduction in sampled CDS crashes will reduce the precision of annual national estimates used in support of agency analyses. Some analyses may have to be postponed until more crash cases become available on a particular topic.

The NASS General Estimates System (GES) is used to provide problem size assessments for many of the agency's rulemaking analyses. GES also provides the agency with national estimates for all types of motor vehicle crashes and is the agency's only source of pedestrian, pedalcyclist, motorcycle, and large truck involvements. GES national estimates of crash characteristics will still be produced, despite the 25 percent reduction in sampled cases. The net effect will be an increase in sampling variation, which the agency anticipates will increase by an average of approximately 16 percent. This will have a minimal effect on broad, overall estimates (e.g., number of crashes or vehicle involvements), but it will affect estimates for characteristics where the sample size is already small.

Mr. CARR. What is the justification for these proposed reductions?

[The information follows:]

The majority of NASS costs are fixed and include all the facilities, equipment, and contractual requirements for the collection and computer processing of nationally representative data on motor vehicle crashes. The only variable expense category is labor which is directly related to the number of crash cases collected in CDS and

GES. For NASS to operate at the proposed FY 1995 level, all funds not used for fixed costs would be used to attempt to maintain the NASS CDS and GES field structure. The decrease in the number of crash cases will reduce the precision of the annual national estimates but are expected to meet the agency's data needs, but with lower precision and with a delay needed, in some cases, for more data to accumulate.

Mr. CARR. What economies might be instituted in fiscal year 1995 in the NASS program to maintain the current number of crashes reported to GES and CDS?

[The information follows:]

NASS is currently the only means available to the agency to collect crash data that are both representative and in the detail required for the agency's research and regulatory needs. Significant economies have already been implemented. The program was reduced from 36 to 24 data collection sites in 1991. Furthermore, all 26 contracts which run the 24 data collection site and the 2 quality control centers were renegotiated by combining the previous multiple contract structure into 2 contracts. New contracts were awarded during the first quarter of FY 1994. This new contract structure will improve field productivity and consolidate agency contract management activities.

There are no further economies that can be instituted in fiscal year 1995 that will maintain the current number of crashes reported to GES and CDS. If funded at the FY 1995 Request level of $8.359 million, NASS will continue GES and CDS data collection without this request will: (1) reduce the number of automated PARs in a nationally representative NASS GES database, significantly reducing the accuracy and usefulness of the GES data in monitoring trends and estimating police reported traffic crashes on public roads; (2) reduce NASS CDS data collection operations, number of cases investigated, quality control, and ADP of crash data; and (3) eliminate data collection on pedestrian crashes involving late model year passenger vehicles.

In essence, we have tried everything in order not to sacrifice quality control and the quantity of cases required to meet the agency's rulemaking and research needs.

Mr. CARR. What would be the expected benefits of maintaining the current number of crashes reported to GES and CDS?

[The information follows:]

Maintaining the current number of crashes sampled in the National Accident Sampling System (NASS) Crashworthiness Data System (CDS) and the General Estimates System (GES) would mean that data from these two important data systems would continue to be produced at their current levels of precision. The CDS, already operating at a minimal size for obtaining serious injury cases and for maintaining reasonable sampling errors, would continue to operate without further interruptions in its ability to provide data in support of the agency's standards evaluation and other research needs. CDS would continue at current levels, providing the agency with detailed investigations of all types of crashes, but especially those involving recently introduced technologies including airbages and antilock braking systems. The CDS is one of the most attainable and cost-effective means for speeding up the agency's research and regulatory program to improve frontal and side impact protection. CDS would also begin to accumulate sufficient cases in support of IVHS, by collecting needed precrash variables which were recently added. Maintaining the current sample size in the GES would mean that there would be no reduction in the precision of estimates of police reported traffic crashes on public roads. Estimates of characteristics from smaller population groups like pedestrians, pedalcyclists, motorcyclists, and seriously injured occupants, would not deteriorate to the point that they became statistically unreliable. The wide acceptance of the recent Traffic Safety Facts 1992: A Compilation of Motor Vehicle Crash Data from the Fatal Accident Reporting System and the General Estimates System, the first time that the annual reports from the FARS and the GES were combined in one publication, demonstrates the need for these data.

## NASS CDS EVALUATION

Mr. CARR. Please elaborate on the purpose of NHTSA's evaluation of CDS and when do you anticipate completing this evaluation?

[The information follows:]

In July 1993, NHTSA began planning for the next major change to the NASS CDS which will be implemented in January 1995. This evaluation involves representatives from various user offices in NHTSA.

While minor changes are evaluated more on an annual basis, major data reviews are conducted every five years to determine if the system supports the agency's safety standard evaluation programs and other research projects. For planning purposes, we need to know if the current data are serving our analytical and clinical research needs and where improvements, if any, can be implemented. Our policy is also directed at minimizing changes for at least five years in order to maintain consistency between calendar years for purposes of establishing trends in motor vehicle crashes. The productivity and efficiency of the system are also evaluated to determine the impact of operational changes on costs.

## PEDESTRIAN CRASH DATA STUDY

Mr. CARR. Please elaborate on the pedestrian crash data study, including its purpose, the types of data that will be collected, whether this is a one-time or ongoing initiative, how the information collected will be used, and its cost.

[The information follows:]

Pedestrian crash data previously collected by the NASS Continuous Sampling System (CSS) are over seven years old, and the Pedestrian Injury Causation Study (PICS) data are fifteen years old. This presents a need for an up-to-date pedestrian crash data file that will address whether late model year passenger cars, and light trucks and vans, with shorter and more sloping hoods, are producing the same type of injuries that occurred years ago. The purpose of this study is to establish a relationship between vehicle and pedestrian contact parameters along with injury types and severities, and to obtain detailed crash scene and vehicle information to reconstruct the crash dynamics.

The data will be collected over a three year period and will be used for laboratory and computer reconstructions. Extensive data will be collected on pedestrian injuries and measurements, pedestrian contact points, wrap distances, event sequences, hood measurements and damages. Since the study will be conducted within the framework of the NASS CDS, costs are estimated to be approximately $75,000 for initial equipment purchases and training. This cost will be absorbed by the program. The cost for conducting the study which is scheduled to be implemented in the summer of 1994 will be an offset of the case yield from the NASS CDS. For every Pedestrian Crash Data Study case that is initiated by a researcher, two NASS CDS cases will be eliminated in order to balance the researcher's work load. When fully staffed, six study sites should produce approximately 300 pedestrian cases per year.

## SALE OF GES AND CDS DATA

Mr. CARR. How much was realized from the sale of GES and CDS statistical files to the public in 1992 and 1993?

[The information follows:]

| | |
|---|---|
| 1992: | |
| CDS | $1,850.00 |
| GES | 737.00 |
| 1993: | |
| CDS | 5,472.00 |
| GES | 2,250.00 |
| Total | 10,309.00 |

## GES AND CDS INFORMATION PURCHASERS

Mr. CARR. Please provide a listing of the purchasers of this data.

[The information follows:]

1992

CDS—Failure Analysis, Friedman Research, General Motors, National Study Center, and Pennsylvania State University.

GES—Failure Analysis, General Motors, Harvard Injury Control Center.

1993

CDS—Charles Moffatt, Failure Analysis, Finkelstein and Associates, Ford Motor Company, General Motors, Harvard Injury Control Center, Michigan, Mitsubishi Motors of America, NOVA Engineering, Sandia Laboratories, Study Center for Trauma, Takata Corporation, U.S. General Trade Office, University of Virginia, University of Hawaii, and William Wecker Associates.

GES—Failure Analysis, General Motors, HIPRC, Sandia Laboratories, Wall Street Journal; and William Wecker Associates.

In addition to the purchasers listed above we honored thirty-eight requests for data and/or documentation from government agencies for which there was no payment.

Mr. CARR. What is the CODES project and how successful has it been?

[The information follows:]

The Crash Outcome Data Evaluation System (CODES) project is the name NHTSA has associated with the project that Section 1031(b) of the ISTEA directed NHTSA to conduct, i.e., evaluate the benefits of safety belt and motorcycle helmet use using state injury data. NHTSA awarded cooperative agreements to the states of Hawaii, Maine, Missouri, New York, Pennsylvania, Utah, and Wisconsin to link their state's crash data to statewide medical outcome data. The linked data will be used to determine the effect of safety belts and helmets on severity, inpatient costs, mortality, and morbidity. All of the CODES states will be implementing a uniform research model to generate information necessary for the required report to Congress.

All seven states have successfully demonstrated the feasibility of linking state crash data to EMS, hospital discharge, inpatient rehabilitation, and state claims data. Some states have also successfully linked to emergency department, trauma/head/spinal cord registries, census, driver licensing, vehicle registration, convictions, death certificates, national automobile insurance files, and/or health insurance files. The linked data have been used to date by one participating state as part of a statewide geographic information system, by another to prevent the repeal of motorcycle helmet legislation, and by a third to demonstrate the increased cost to Medicaid when helmet use is not mandated and to support community-based traffic safety programs.

Mr. CARR. What amounts are available to participating States through ISTEA?

[The information follows:]

ISTEA provided five million dollars which was distributed through cooperative agreements to the seven CODES sites—Hawaii, Maine, Missouri, New York, Pennsylvania, Utah, and Wisconsin—effective October 1, 1992.

## CODES PROJECT

Mr. CARR. Specifically, what is NHTSA's role in the CODES project and what is NHTSA's fiscal year 1994 and fiscal year 1995 commitment to the project in terms of dollars and staff?

[The information follows:]

In addition to directing the project and acting as Contracting Officer's Technical Representative for the cooperative agreements, the NHTSA role in the Crash Outcome Data Evaluation System (CODES) project has been:

To provide technical assistance to the CODES states regarding the linkage of state data.

To standardize analytical applications of the linked data so that states generate comparable results on the benefits of safety belts and helmets for the Report to Congress.

To encourage other states to develop data linkage capabilities.

To develop applications for linked data to support development of the safety management systems and highway safety problem identification, planning, and evaluation activities.

To promote collaboration between highway safety and the health communities to reduce unnecessary morbidity and mortality from motor vehicle crashes.

To encourage use of state funds for the linkage of state data in order to expand state traffic records capabilities and improve the quality of the state data.

When the linked data and the results of the mandated research models are received from the states, NHTSA will complete the report to Congress, which is required by February, 1996.

NHTSA provides approximately ½ of a full time equivalent staff person to direct the project. Additionally, NHTSA has allocated funding in the amount of $250K in its FY 1994 budget to provide the technical assistance listed above. The same level of funding has been requested in the FY 1995 budget.

Mr. CARR. What are the agency's plans for encouraging States to use CODES data linkage software?

[The information follows:]

NHTSA, through the National Association of Governor's Highway Safety Representatives, recently distributed free probabilistic linkage microcomputer software (MINICODES) and a step-by-step instruction manual to each Governor's Highway Safety Representative's office to encourage the linkage of crash and injury data. This software is pre-programmed to facilitate the linkage of crash to EMS records, linked crash/EMS records to hospital discharge data, and the residual unlinked crash records to hospital discharge data. States that wish to link to other traffic and injury records are encouraged to purchase the commercial version of the software (AUTOMATCH) used by the seven CODES grantee states to link their files. This version allows states to link, unduplicate, and to geocode their files and is reasonably priced.

In addition NHTSA will continue to provide technical assistance to the states about how to link state data and use the linked data analytically. NHTSA also will provide examples of the linkage of crash to medical outcome, census, driver licensing, vehicle registration, convictions, death certificates, national automobile insurance files, and/or health insurance files upon request by states interested in developing data linkage capabilities.

## STATE DATA PROGRAM

Mr. CARR. Please provide a list of the 17 states that participate in the state data program.

[The information follows:]

The National Highway Traffic Safety Administration obtains police accident report data files from the following 17 states for the state data program: California, Florida, Georgia, Illinois, Indiana, Kansas, Maryland, Michigan, Missouri, New Mexico, North Carolina, Ohio, Pennsylvania, Texas, Utah, Virginia, and Washington.

Mr. CARR. The justifications indicate that the budget increase requested for the state data program in fiscal year 1995 would be used "to encourage states to use probabilistic linkage methodology to link traffic records databases." Please elaborate on what activities would be conducted, which data bases would be linked, and which states would be involved?

[The information follows:]

NHTSA is planning to do the following to encourage file linkage in states:

Provide examples of the linkage of crash to emergency medical services, emergency department, hospital discharge, trauma/head/spinal cord registries, census, driver licensing, vehicle registration, convictions, death certificates, national automobile insurance files, and/or health insurance files upon request by states interested in developing data linkage capabilities.

Provide technical assistance about data file needs and file preparation required for data linkage, establishing a state CODES advisory committee to resolve issues related to data access, probabilistic linkage techniques, reliability of linked data, and other issues related to the successful linkage of state data.

Will use the additional funding provided in the budget to identify potential uses of CODES databases for problem identification, program planning and program evaluation.

In addition to the seven CODES states, NHTSA will work with all states that express an interest in file linkage, to the extent budget resources permit. To date, the following eight states have contacted NHTSA for assistance in developing their data linkage capabilities using state funds—Colorado, Florida, Illinois, Maryland, Nebraska, New Mexico, Washington, and West Virginia.

Mr. CARR. What would be the impact of holding the state data program to its current level of $1.236 million in fiscal year 1995?

[The information follows:]

Several states are working with the agency to link their medical outcome data with crash data in a project referred to as Crash Outcome Data Evaluation Systems (CODES). These data were developed to report to Congress on the benefits of safety belts and motorcycle helmets as required by the Intermodal Surface Transportation Efficiency Act of 1991. If 1995 funding is held to its current level of $1.236 million, then evaluating the usefulness of linked crash and medical outcome data from the CODES project and assisting states in analytical efforts would be severely curtailed.

## ASSESSMENT OF CADRE IMPLEMENTATION

Mr. CARR. Please discuss the results of your state-by–state assessment of CADRE implementation and describe the next steps of your implementation plan.

[The information follows:]

The state-by-state assessment of CADRE implementation found that 28 states have adopted or are planning to adopt some of the recommended 18 data elements. CADRE was found to be fully implemented in 4 states.

The agency continues to promote the adoption of CADRE through its traffic records specialists and each of its state regional program managers. The National Safety Council and the National Association of Governor's Highway Safety Representatives endorse the adoption of CADRE through their national agendas. The traffic records grant program was developed to encourage the states to include the uniform data elements of CADRE when they assessed their state's safety information system's strengths and weaknesses. The grant encourages the states to include CADRE in their strategic planning process and to plan for the implementation of some or all of the data elements.

The agency will continue to work with the states to provide support and technical assistance as they make improvements in their safety information systems.

Mr. CARR. How will the results of NHTSA's assessment of state implementation of CADRE be incorporated into the traffic records state grant program?

[The information follows:]

The CADRE assessment indicated that 28 states had adopted or are planning to adopt some of the 18 data elements. A large number of these states indicated that they would consider adopting additional elements at the time they revise their traffic crash reports. NHTSA and FHWA encouraged states applying for the grant program to consider the adoption of CADRE elements as part of their strategic planning process to improve the overall quality of their traffic records systems.

## TRUCK ACCIDENT AND TRAVEL DATA

Mr. CARR. It has been reported that truck accidents are underreported by as much as 40 percent. Moreover, the Transportation Research Board and others have recommended that the Department improve truck accident and travel data, especially as they relate to the reporting of nonfatal accidents, estimates of truck travel, and the identification of truck configurations. What progress has NHTSA made in addressing these concerns?

[The information follows:]

Since 1990, through an interagency agreement with the Federal Highway Administration (FHWA), large truck crashes have been oversampled in one of NHTSA's data collection systems, the General Estimates System (GES). The total sample size of about 7,500 crashes allows for reliable estimates to be made of large truck nonfatal crash involvements. In addition, information on truck configuration is now collected in both the GES and the Fatal Accident Reporting System (FARS) using the format recommended by the National Governor's Association's Truck and Bus Elements. FHWA and NHTSA are encouraging the States to adopt the NGA elements. Until these elements are widely adopted, the information will not be adequately captured by our national reporting systems. For truck travel information, NHTSA relies on the vehicle miles travelled data from the FHWA.

## GAO REPORT ON LONGER COMBINATION VEHICLES (LCV)

Mr. CARR. The General Accounting Office recently reported that insufficient data exists to ascertain the relative safety of longer combination vehicles as compared with other trucks. Specifically, the GAO concluded that there is not enough data to calculate crash rates per mile driven for the longer combination vehicles compared with single trailer trucks. Does NHTSA agree with this assessment and are you working with FHWA to improve existing data bases on accidents involving extra long double and triple tractor trailer trucks?

[The information follows:]

The GAO report, "The Safety of Longer Combination Vehicles (LCV) is Unknown," focuses on state crash data reporting systems and concludes that the presently structured systems do not adequately capture nor accurately portray the crash involvement histories of this type of vehicle. The agency agrees with this conclusion, and has made modifications to its data collection systems to better answer questions about these vehicles. In 1991, the agency modified its Fatal Accident Reporting System (FARS) to include data elements which will make it easier to track fatal crashes involving LCVs. In 1992, the agency similarly modified its General Estimates System (GES) to better track the nonfatal crash involvement patterns of LCVs.

The agency is coordinating with FHWA in several areas concerning LCVs. The agency has endorsed FHWA's effort to encourage the states to adopt the National Governor's Association's Truck and Bus Data Elements so state data could be used to identify these vehicles. NHTSA provides funding support to the University of Michigan's Transportation Research Institute's Trucks in Fatal Accidents (TIFA) project, which FHWA is using to more accurately assess LCV safety. Further, the agency is conducting LCV operational tests in cooperation with FHWA, to better enable the agency to gauge the performance of LCVs in regard to braking and dynamic stability and to assess potential workload and stress effects associated with LCV drivers.

## PROGRAM EVALUATION STUDIES

Mr. CARR. What program evaluation studies are currently under way and what is planned for fiscal year 1995?

[The information follows:]

Six evaluations are currently underway:

Automatic Occupant Protection—An update of analyses completed in an Interim Report in 1992, using data from the 1993 Fatality Reporting System (FARS).

Odometer Fraud—An analysis of the current program's success in reducing odometer rollbacks.

Antilock Brakes—The effect on fatalities and injuries of antilock brakes (ABS) in passenger cars will be examined.

Lap/Shoulder Belts for Back Seat Occupants.

Defects Investigation Program—An assessment of the current process focusing on why owners of recalled vehicles choose to heed or ignore recall notification.

Highway Safety Assessment—Continuation of information and data collection in six of ten states selected to represent the national highway safety program.

### EVALUATIONS PLANNED FOR 1995

Small Car Safety—A follow-up study of the effect of downsizing/weight reduction.

Steering Assembly and Interior Impact Protection in Light Trucks—an evaluation of the effectiveness of the safety regulation on these vehicles.

Head Restraints for Light Trucks.

Auto Theft Prevention—A report to Congress on the effect of the expanded theft prevention regulation is due in 1997.

### DEFECTS INVESTIGATION PROGRAM EVALUATION

Mr. CARR. Last year, NHTSA indicated that it had under way a program evaluation of the defects investigation program. What is the status of this effort and what issues are you examining?

[The information follows:]

The issues being examined are: (1) why owners of recalled vehicles choose to heed or ignore recall notifications, and (2) why manufacturers are unable to locate all owners of recalled vehicles.

The tasks associated with this assessment are to: (1) review and analyze agency-mandated Quarterly Reports about the conduct of recalls, and agency-conducted audits of some of the recalls, (2) interview a representative sample of owners of recalled vehicles, (3) review information from manufacturers about how they identify owners of recalled vehicles, and (4) explore other approaches toward generating more public interest in recall campaigns.

The initial analyses have been completed.

### HIGHWAY SAFETY ASSESSMENT

Mr. CARR. Which two states will be the focus of the next phase of the highway safety assessment and what is your plan and timetable for moving forward with this program evaluation?

[The information follows:]

Kansas and Colorado are the next two states scheduled for field visits to collect data and information for the assessment. The final four states, of the sample of ten selected for the assessment, are scheduled for field visits during the remainder of calendar year 1994. The analysis of data and information collected in each sample state is compiled concurrently and is expected to be complete by late spring of 1995. The individual state assessment information will be combined into a national assessment report by the summer of 1995.

The following is the list of states selected for the assessment:

Region and sample State—I, Connecticut; II, New Jersey; III, Pennsylvania; IV, North Carolina; V, Ohio; VI, New Mexico; VII, Kansas; VIII, Colorado; IX, Nevada; X, Washington.

### STAFFING: EXECUTIVE ORDER COMPLIANCE

Mr. CARR. President Clinton's executive order calls for a cumulative 4 percent reduction in staffing levels below fiscal year 1993 levels by fiscal year 1995. Please demonstrate how NHTSA is complying with the executive order.

[The information follows:]

The Executive Order applies at the Departmental level and the required reductions were distributed among the modes in accordance with the Secretary's budget and programmatic priorities, as reflected in the President's Budget. Consistent with the Executive Order, NHTSA staffing levels have been declining and are projected to continue to decline in FY 1995. Measured in full-time equivalent (FTE) staff-years, the actual level for FY 1993 was 714, the estimated level for FY 1994 is 683, and the level requested for FY 1995 is 667.

Mr. CARR. What additional staffing reductions will be needed in order to comply with the National Performance Review recommendations that federal government staff levels be reduced by 12 percent by 1999?

[The information follows:]

A preliminary estimate is that NHTSA staffing would need to continue to decline to a level of 618 full-time equivalent (FTE) staff-years in fiscal year 1999, based on a 12 percent reduction scenario. However, final budget decisions have not been made about staffing levels beyond fiscal year 1995 for the Department and its modal administrations, so any preliminary estimate is still subject to change.

### REGIONAL OPERATIONS STAFFING

Mr. CARR. The conference report on the fiscal year 1994 transportation appropriations bill directs that not more than 93 permanent positions and 95 full-time equivalent positions shall be available for NHTSA regional operations in both headquarters and the field. What actions have been taken to comply with that directive?

[The information follows:]

Since the passage of the appropriations bill, NHTSA has reduced its permanent positions through attrition and is in compliance with the ceiling of 93 permanent positions for NHTSA regional operations. The agency is working to meet the target number for full-time equivalent positions by the end of the fiscal year.

Mr. CARR. What are the comparable staffing estimates for regional operations under the fiscal year 1995 request?

[The information follows:]

The budget for fiscal year assumes that the staffing levels for regional operations will be the same as for fiscal year 1994 (93 authorized full-time permanent positions; 95 full-time equivalent staff-years). This covers both headquarters and regional offices.

### LOCALITY PAY COST

Mr. CARR. What is the cost of the 1994 locality pay increase and how were these costs absorbed in NHTSA's fiscal year 1994 budget?

[The information follows:]

The cost is estimated to be $1.351 million for three quarters of fiscal year 1994. NHTSA is providing for these costs by using available funds that were unobligated in prior years and carried forward into fiscal year 1994.

### PC&B REQUIREMENTS

Mr. CARR. What assumptions were made in calculating NHTSA's PC&B requirements in fiscal year 1995?

[The information follows:]

For personnel compensation and benefits (PC&B), the level requested for fiscal year 1995 assumes technical adjustments will be made to the fiscal year 1994 enacted level, including a reduction in full-time equivalent (FTE) staff-years. The fiscal year 1994 enacted level, the adjustments, and the total level requested for fiscal year 1995 are shown below:

| | *Thousands* |
|---|---|
| FY 1994 level for salaries and benefits before adjustment for FY 1994 locality pay. | $46,035 |
| Impact in FY 1995 of the FY 1994 locality pay adjustment for GS/GM and SES employees but excluding "special rate" employees). | 1,801 |
| Technical adjustment to compensate for impact of FY 1994 funding shortfall. | 220 |
| Pay raise of 1.6 percent effective on January 1, 1995. The increase requested will provide the pay raise for three quarters during FY 1995. | 574 |
| Adjustment for Federal Employes' Retirement System (FERS). | 230 |
| Adjustment for one less work-day during FY 1995. (There are 260 work-days during FY 1995 compared with 261 work-days during FY 1994) | −185 |

| | Thousands |
|---|---|
| Decrease associated with a net reduction of 16 full-time equivalent (FTE) staff-years. This net reduction is comprised of a reduction of 10 FTE pursuant to Executive Order requirements for government-wide staffing reductions, a reduction of 7FTE (for 7 positions) due to proposed termination of the odometer fraud program, and an increase of 1 FTE for partial-year staffing of 2 new positions proposed for the IVHS program. | −1,088 |
| FY 1995 level requested for salaries and benefits. | 47,587 |

## TRAVEL COST INCREASES

Mr. CARR. Why did travel costs for the public and consumer affairs office and the plans and policy office increase by 67 percent and 75 percent respectively between fiscal years 1992 to 1994, while NHTSA's overall travel budget remained essentially level?

[The information follows:]

The Public and Consumer Affairs fiscal year 1994 travel budget is anticipated to be used primarily by Administration appointees in support of outreach to consumer groups. These activities will include carrying out the new Congressional mandates for increased public awareness of the Auto Safety Hotline and the New Car Assessment Program. Commitments have been made to speak at all of the national consumer conferences. The enormous impact of traffic injuries on health care costs is a new focus of NHTSA consumer information, not addressed in previous years. Travel will be performed in relation to this aspect of NHTSA's mission to reduce fatalities and injuries.

In fiscal year 1993, the Office of Plans and Policy (P&P) initiated a study of the highway safety grants program, in response to Congressional concerns regarding the program's effectiveness. The historic performance of traffic safety programs in ten states will be assessed. To assist the agency in this effort, we have executed a cooperative agreement with the International Association of Chiefs of Police to collect data at the local level in the states. However, personnel from P&P must travel to each state for several days for opening conferences with various state and local officials, and must spend at least two weeks in each state conducting further interviews and data collection. These trips have been the primary reason for the increase in travel costs for plans and policy office.

## INTERNATIONAL MEETING

Mr. CARR. What is the Meeting of Experts on Lighting and Light–Signalling of the Economic Commission for Europe and why is it important that NHTSA send a representative to this biannual meeting?

[The information follows:]

The Meeting of Experts on Lighting and Light-Signalling of the Economic Commission for Europe (ECE) has the responsibility for developing the draft form of regulations for motor vehicle lighting equipment and installation. The biannual meeting involves the negotiation of requirements that manufacturers must meet to certify their motor vehicles for sale in the various countries of Europe and elsewhere that have adopted ECE regulations. Participation in these meetings is important because it implements a policy of reducing the potential for non-tariff barriers to trade through achieving compatibility among ECE regulations and the Federal Motor Vehicle Safety Standards.

The United States industry supports National Highway Traffic Safety Administration participation in these meetings because compatibility of motor vehicle safety regulations reduces their administrative and testing burden associated with certification.

## STAFFING—OFFICE OF INTERGOVERNMENTAL AFFAIRS

Mr. CARR. What plans does NHTSA have to fill the position in the Office of Intergovernmental Affairs?

[The information follows:]

NHTSA plans to hire a person this year to fill this position.

### PERMANENT CHANGE OF STATION FUNDING

Mr. CARR. What has been spent for permanent change of station moves to date in fiscal year 1994?

[The information follows:]

A total of $18,798 has been spent for permanent change-of-station moves to date.

Mr. CARR. Why should $118,000 be provided for change-of-station moves in fiscal year 1995 when your previous estimates have been so poor?

[The information follows:]

Based on anticipated higher than usual attrition rate due to expanded early retirement authority and potential "buy out" authority in fiscal year 1994, $118,000 should be provided for fiscal year 1995 to cover permanent change-of-station moves in the process of filling key positions projected to be vacated.

### PRINTING AND REPRODUCTION COSTS

Mr. CARR. What are the reasons for the proposed 27 percent increase in printing and reproduction expenses in fiscal year 1995? What would be the impact of not providing these resources?

[The information follows:]

The proposed 27 percent increase is needed to cover increased printing costs projected by the WCF (DOT's printing plant, and increased costs of hot-copy duplication), and a projected increase in GPO printing costs to cover agency rulemaking actions and information collections in the Federal Register and Code of Federal Regulations.

Without the proposed 27 percent increase, NHTSA's rulemaking actions and information collection would be severely impacted since they have to be published in the Federal Register and Code of Federal Regulations. Also, the design, printing and distribution of NHTSA publications, periodicals, press releases, and administrative documents would be impacted, thereby disrupting NHTSA's programs.

### VEHICLE RESEARCH AND TEST CENTER (VRTC) FUNDING

Mr. CARR. What activities are conducted at the Vehicle Research and Test Center and why is its budget proposed to increase by 17 percent in fiscal year 1995?

[The information follows:]

The Vehicle Research and Test Center (VRTC), located in East Liberty, Ohio, is an in-house research laboratory for NHTSA. VRTC was created to perform high priority, short term activities, complex programs that require close federal involvement, and sensitive or confidential research activities. This past year VRTC conducted research and analysis for seven ISTEA programs, several congressionally mandated programs, and additional sensitive defect investigation activities such as the GM pickup fuel tanks and Nissan Van engine fire investigations.

In fiscal year 1995, the Agency decided to transfer $103,000 from the Administrative Services budget to VRTC's budget in order to more accurately represent the agency's operating expenses. Therefore, since most of the increase ($103,000) represents funds transferred from NHTSA's Administrative Services budget, the actual increase to the VRTC budget is only $9,000 (not $112,000). This $9,000 increase, about 1.2 percent, in the fiscal year 1995 budget request represents a modest inflationary cost increase for VRTC.

### SAN ANGELO FACILITY ACTIVITIES

Mr. CARR. What activities are conducted at the San Angelo facility?

[The information follows:]

In order to fulfill our mandatory obligation to enforce the Uniform Tire Quality Grading (UTQG) regulation, the UTQG Test Facility in San Angelo, Texas has been established by NJTSA as the test facility for compliance testing. As part of this compliance effort, the facility is responsible for testing and monitoring tire traction and treadwear requirements as well as provide manufacturers daily information regarding the utilization of the traction pads. The base course wear rate is determined for the course monitoring tires that are used to establish the tire treadwear grades.

### STAFFING: SAN ANGELO AND VRTC FACILITIES

Mr. CARR. How many positions and full-time equivalents are allocated to the VRTC and San Angelo facilities?

[The information follows:]

The following staffing levels apply for fiscal year 1994 and 1995:

| | Authorized FTPs | Authorized FTEs |
|---|---|---|
| Vehicle Research & Test Center | 26 | 26 |
| San Angelo (Uniform Tire Quality Grading Test Facility) | 2 | 2 |

### COMPUTER SUPPORT FUNDING

Mr. CARR. Please provide some additional detail on why the requested $889,000 increase for computer support is justified.

[The information follows:]

The $889,000 increase will support the agency's program development, rulemaking and enforcement missions by providing electronic tools to improve access and analytical capability of agency employees. The requested increases are in the following areas:

Operations & Maintenance +$476 thousand:

An increase of $136 thousand is needed to support and maintain the modernization of information processing, storage and communications capabilities. The maintenance of the Departmental fiber optic network connections provides linkage to the Department, other agencies, OMB and Internet. Over 75 percent of the FY 1995 request is required to maintain the equipment infrastructure and pay the OST mandated charges for financial,personnel, payroll and computer center usage. The increase also includes $340 thousand to fund contractor support and provide equipment upgrades to sustain the existing systems and networks.

Agency Wide Initiatives +$413 thousand:

A $250 thousand increase will provide continued installation and utilization of an imaging network throughout the agency to enhance information development and exchange between NHTSA offices and the public. In FY 1995 obsolescent technology will be replaced to handle the increased workload expected within the agency and to improve the capability to electronically access and analyze information that is only available in paper format. This imaging system will provide the public with access to image files and reports. An increase of $163 thousand is needed for improvements in network and electronic mail systems that would provide enhanced information sharing to headquarters and regional office databases. This improvement will provide connectivity to external highway safety information resources including the states.

### HEALTH INSURANCE COSTS

Mr. CARR. In fiscal year 1993, how close were your budgetary estimates of health insurance cost increases to the increases actually experienced?

[The information follows:]

Actual costs for health benefits were $1,563,233 in fiscal year 1993, compared with a projected level of $1,495,000. The actual increase was $121,355 or 8.4 percent over the fiscal year 1992 level of $1,441,878. This is higher than the projected increase. The projection was for an increase of $53,122 or 3.7 percent over fiscal year 1992.

## NHTSA FUNDING COMPARISON—FISCAL YEAR 1994 TO FISCAL YEAR 1995

Mr. CARR. Please provide a table comparing the amounts for fiscal year 1994 as shown in your 1995 justification to the amounts indicated in last year's appropriations conference report, and explain in detail any reprogrammings into or out of those activities which account for those differences. This should be similar in format to the data provided on page 475 of last year's hearing record.

[The information follows:]

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION—FY 1994 Funding

[Dollars in thousands]

| | Conference report assumption | Subsequent budget assumption |
|---|---|---|
| Operations and Research: | | |
| Rulemaking Programs | $10,733 | $10,622 |
| Enforcement Programs | 17,913 | 17,801 |
| Highway Safety Programs | 40,299 | 40,474 |
| Research and Analysis | 49,638 | 49,521 |
| Office of Administrator/Staff Offices | 3,541 | 3,490 |
| General Administration | 8,464 | 8,280 |
| Account-Wide Adjustments | −400 | [1] |
| Operations and Research (gross) | 130,188 | 130,188 |
| Reimbursements from Grants Account: | | |
| Section 402 Grant Administration | −5,153 | −5,153 |
| Nat'l Driver Register Salaries & Exp. | −890 | −890 |
| Operations and Research (net) | 124,145 | 124,145 |
| Highway Traffic Safety Grants: | | |
| Section 402 Formula Grants | 123,000 | 123,000 |
| Section 408 Alcohol Safety Incentive Grants | 10,500 | 10,500 |
| Section 410 Alcohol-Impaired Driving Countermeasures Grants | 25,000 | 25,000 |
| Section 153 Safety Belt and Motorcycle Helmet Use Grants | 12,000 | 12,000 |
| National Driver Register | 3,500 | 3,500 |
| Highway Traffic Safety Grants | 174,000 | 174,000 |
| NHTSA Total | 298,145 | 298,145 |

[1] Account-wide adjustments have been allocated to individual program areas.

## TRAVEL EXPENSES

Mr. CARR. Please update the travel expenses information shown on page 478 of last year's hearing record by providing data for fiscal years 1993 through 1995.

[The information follows:]

### TRAVEL AND TRANSPORTATION OF PERSONS
(dollars in thousands)

| | Fiscal Year | | |
|---|---|---|---|
| Budget Activities/Staff Offices | 1993 | 1994 | 1995 |
| Rulemaking Programs | $58 | $51 | $60 |
| Enforcement Programs | 102 | 86 | 95 |
| Highway Safety Program: | | | |
| Headquarters | 290 | 266 | 299 |
| Regional Offices | 298 | 347 | 317 |
| Subtotal, Highway Safety Program | 588 | 613 | 616 |
| Research and Analysis Programs | 113 | 130 | 140 |
| Office of the Administrator: | | | |
| Administrator/Deputy | 4 | 28 | 30 |
| Civil Rights | 3 | 4 | 4 |
| Chief Counsel | 7 | 13 | 15 |
| Public and Consumer Affairs | 5 | 18 | 20 |
| Subtotal, Office of the Administrator | 19 | 63 | 69 |
| General Administration: | | | |
| Plans and Policy | 7 | 15 | 16 |
| Administration | 12 | 16 | 25 |
| Change of Station | 3 | 1 | 1 |
| Subtotal, General Administration | 22 | 32 | 42 |
| Total, Travel and Transportation of Persons | 902 | 975 | 1022 |
| Funding Derivation: | | | |
| Operations and Research Funding | 692 | 725 | 772 |
| Section 402 Funding | 210 | 250 | 250 |

## OVERSEAS TRAVEL

Mr. CARR. Please update the data on overseas travel found on pages 480 through 482 of last year's hearing record, beginning from the date of last year's submission and continuing to the present time.

[The information follows:]

APRIL 1993

One person went to Switzerland for 4 days as the U.S. Delegate to the 64th Session of the Meeting of Experts on General Safety Provisions of the Economic Commission for Europe. The cost: $1,888.95.

One person went to Germany for 5 days to meet with German Government officials and other organizations to coordinate and plan the 14th International Technical Conference for the Enhancement of the Safety of Vehicles (ESV) to be held in Germany in 1994. The cost: $1,711.00.

MAY 1993

One person went to Germany for 6 days as the U.S. participant in the 9th session on anthropomorphic test devices and frontal crash protection of car occupants of the European Experimental Vehicles Committee, and to participate in discussions on offset crash testing. The cost: $1,636.00.

JUNE 1993

One person went to Switzerland for 5 days as the U.S. Delegate to the 13th Session of the Meeting of Experts on Passive Safety of the Economic Commission for Europe. The cost: $1,797.85.

One person went to Switzerland for 6 days as the U.S. Delegate to the administrative committee on the program of work and the 100th Session of the Working Party on the Construction of Vehicles of the Economic Commission for Europe. The cost: $1,958.96.

AUGUST 1993

One person went to Switzerland for 5 days as the U.S. Delegate to the 33rd Session of the Meeting of Experts on Brakes and Running Gear of the Economic Commission for Europe. The cost: $2,125.77.

SEPTEMBER 1993

One person went to Italy for 5 days as the U.S. Delegate to a Special Session of the Meeting of Experts on Passive Safety of the Economic Commission for Europe concerning the development of a European regulation on the protection of passenger car occupants in lateral collisions. The cost: $1,970.81.

OCTOBER 1993

One person went to England for 4 days as the U.S. Delegate to an International Standards Organization Working Group on the subject of motorcycle impact test procedures. The cost: $1,656.00.

One person went to Israel for 6 days as the U.S. Delegate to the 21st Session of the Working Party on Road Traffic Safety of the Economic Commission for Europe (ECE), and the Seminar on Safety of Young Drivers sponsored by the Inland Transport Committee of the ECE. The cost: $2,160.11.

One person went to Italy for 5 days as the U.S. participant in the 10th session on anthropomorphic test devices and frontal crash protection of car occupants of the European Experimental Vehicles Committee. The cost: $1,890.00.

One person went to Switzerland for 6 days as the U.S. Delegate to the administrative committee on the program of work and the 101st Session of the Working Party on the Construction of Vehicles of the Economic Commission for Europe. The cost: $2,147.34.

NOVEMBER 1993

One person went to Switzerland for 6 days as the U.S. Delegate to the 31st Session of the Meeting of Experts on Lighting and Light-Signalling of the Economic Commission for Europe. The cost: $2,288.43.

One person went to Switzerland for 5 days as the U.S. Delegate to the 14th Session of the Meeting of Experts on Passive Safety of the Economic Commission for Europe. The cost: $1,928.30.

DECEMBER 1993

One person went to France for 3 days to participate in a colloquium on the factors (e.g. alcohol, drowsiness, inattention) associated with changes in a driver's capabilities and how to measure them. The cost: $1,348.00.

## JANUARY 1994

One person went to England for 5 days as the U.S. participant in the 11th session on anthropomorphic test devices and frontal crash protection of car occupants of the European Experimental Vehicles Committee. The cost: $1,411.00.

## FEBRUARY 1994

One person went to Switzerland for 6 days as the U.S. Delegate to the 32nd Session of the Meeting of Experts on Brakes and Running Gear of the Economic Commission for Europe. The cost: $1,979.61.

## MARCH 1994

One person went to Germany for 4 days to meet with German Government officials and other organizations to complete the planning and arrangements for the 14th International Technical Conference for the Enhancement of the Safety of Vehicles (ESV) to be held in Germany in May, 1994. The cost: $1,506.00.

One person went to Switzerland for 6 days as the U.S. Delegate to the administrative committee on the program of work and the 102nd Session of the Working Party on the Construction of Vehicles of the Economic Commission for Europe. The cost: $2,215.35.

The total cost of overseas travel performed by NHTSA from mid-April 1993 to the end of March, 1994 was $33,619.48 of which $10,626.63 was funded by NHTSA; $21,832.85 by the Department of State; and $1,160 by the French National Institute for Transport and Safety Research (INRETS).

## FIRST CLASS TRAVEL

Mr. CARR. Please provide a listing of trips over the past year where NHTSA employees utilized first class air travel.

[The information follows:]

In the past year, no agency employees have utilized first class air travel.

## AMTRAK TRIPS

Mr. CARR. Please also update the listing of trips made by NHTSA headquarters personnel in which Amtrak was utilized.

[The information follows:]

In fiscal year 1993 agency personnel made the following trips in which Amtrak was utilized:

Five trips from Washington, DC, to Newark, NJ, and return.
Four trips from Washington, DC, to New York, NY, and return.
Two trips from Washington, DC, to Trenton, NJ, and return.
One trip from Washington, DC, to Atlanta, GA, and return.
One trip from New Carrollton, MD, to Philadelphia, PA, and return.
One trip from Washington, DC, to New York, NY.

## TRAINING EXPENSES

Mr. CARR. Please update the breakdown of training expenses on pages 485 through 488 by providing data for fiscal years 1992 through 1995.

[The information follows:]

## NHTSA training, fiscal year 1992

A. In House Government and Non-Government

| | |
|---|---|
| Banyon Vines | $ 4,900 |
| MS DOS | 700 |
| dBase III and IV | 2,700 |
| Lotus | 1,000 |
| Harvard Graphics | 200 |
| Pre-Retirement Seminar | 300 |
| Preparation of Work Statements | 5,800 |
| Time Management | 1,700 |
| Professional Development | 3,000 |
| WordPerfect | 10,700 |
| Additional Computer Training | 20,000 |
| Subtotal | 51,000 |

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B. Interagency Training

| | |
|---|---|
| Federal Executive Institute | $18,900 |
| Executive Seminars | 25,675 |
| Supervision | 5,300 |
| Seminar for Prospective Women Managers | 14,450 |
| Labor-Management Relations | 2,000 |
| Management Skills Seminars | 1,800 |
| Equal Employment Opportunity | 1,700 |
| Work Force Diversity | 19,384 |
| Courses Shown in A. for Field Locations | 19,000 |
| Subtotal | $108,209 |

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C. Outside training completed through separate registration at colleges, technical centers and OPM (principally technical) 33,791

| | |
|---|---|
| Total | $193,000 |

## NHTSA training, fiscal year 1993

| | |
|---|---|
| A. In House Government and Non-Government | |
| Banyon Vines | $ 900 |
| MS DOS | -0- |
| dBase III and IV | -0- |
| Lotus | 500 |
| Harvard Graphics | 500 |
| Pre-Retirement Seminar | 500 |
| Preparation of Work Statements | 5,800 |
| Writing Improvement | 7,000 |
| Telephone Techniques | 4,500 |
| Additional Computer Training | 13,000 |
| Subtotal | 32,700 |

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| | |
|---|---|
| B. Interagency Training | |
| Federal Executive Institute | 13,000 |
| Management Development Seminars | 27,500 |
| Supervision | 2,630 |
| Seminar for Prospective Women Managers | 13,920 |
| Labor-Management Relations | 2,000 |
| Equal Employment Opportunity | 2,275 |
| Translator for Hearing Impaired | 5,570 |
| Work Force Diversity | 24,838 |
| Courses Shown in A. For Field Locations | 12,500 |
| Subtotal | $104,233 |

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| | |
|---|---|
| C. Outside training completed through separate registration at colleges, technical centers and OPM (principally technical) | 56,067 |
| Total | $193,000 |

## SUMMARY OF PLANNED TRAINING EXPENDITURES FOR FISCAL YEAR 1994

| COURSE | COST PER PERSON | NUMBER OF SPACES | TOTALS |
|---|---|---|---|
| A. **Executive, Managerial and Special Emphasis** | | | |
| SES Candidate Development Program | $5,000 | 6 | $30,000 |
| Diversity Training | 2,500 | 10 | 25,000 |
| Federal Executive Institute | 7,800 | 1 | 7,800 |
| Seminar for Prospective Women Managers | -0- | 0 | -0- |
| OPM Management Development Centers | 2,395 | 13 | 31,135 |
| Labor Management Relations | 500 | 2 | 1,000 |
| Translators for Hearing Impaired | 100 | 5 | 500 |
| Other Executive/Managerial Training | 1,000 | 10 | 10,000 |
| AIDS In The Workplace Seminar | 2.50 | 500 | 1,250 |
| | | 647 | $106,685 |

B. In House Training $40,000

This training will include basic and advanced WordPerfect and a wide variety of specialized WordPerfect courses. Other courses will include Windows, MS DOS, Oracle, dBase IV, Lotus 1-2-3, Business Graphics, DeskTop Publishing, Writing Improvement, NHTSA Supervision, Preventing Sexual Harassment, Pre Retirement Seminar, Introduction to Procurement for COTR'S, Wellness Seminars, Proofreading, Hotline Training, and Mentors Training.

C. Individual Training $26,315

These activities cover many of the training courses listed above in the In-House section for our ten Regions, our Vehicle Research and Test Center in Ohio, and our facility in San Angelo. In addition, there will be need for Individual Training in Advanced Dbase, Advanced Lotus, Paradox, Harvard Graphics, Basic Budget Techniques, and Business Graphics. Individual Training also includes all of our college and university courses, which include the more complex engineering, technical and specialty courses.

D. NHTSA Totals $173,000

## SUMMARY OF PLANNED TRAINING EXPENDITURES FOR FISCAL YEAR 1995

| COURSE | COST PER PERSON | NUMBER OF SPACES | TOTALS |
|---|---|---|---|
| A. Executive, Managerial and Special Emphasis | | | |
| Diversity Training | 2,550 | 10 | 25,500 |
| Federal Executive Institute | 8,000 | 2 | 16,000 |
| Seminar for Prospective Women Managers | 950 | 5 | 4,750 |
| OPM Management Development Centers | 2,445 | 10 | 24,450 |
| Re-Training Curriculum | 1,000 | 10 | 10,000 |
| Other Executive/Managerial Training | 1,000 | 10 | 10,000 |
| Labor Management Relations | 500 | 2 | 1,000 |
| AIDS In The Workplace Seminar | 2.50 | 500 | 1,250 |
| Translators for Hearing Impaired | 100 | 5 | 500 |
| | | 554 | $93,450 |

B. In House Training $50,000

This training will include basic and advanced WordPerfect and a wide variety of specialized WordPerfect courses. Other courses will include Windows, MS DOS, Oracle, dBase IV, Lotus 1-2-3, Business Graphics, DeskTop Publishing, Writing Improvement, NHTSA Supervision, Preventing Sexual Harassment, Pre Retirement Seminar, Introduction to Procurement for COTR'S, Wellness Seminars, Proofreading, Hotline Training, and Mentors Training.

C. Individual Training $48,550

These activities cover many of the training courses listed above in the In-House section for our ten Regions, our Vehicle Research and Test Center in Ohio, and our facility in San Angelo. In addition, there will be need for Individual Training in Advanced Dbase, Advanced Lotus, Paradox, Harvard Graphics, Basic Budget Techniques, and Business Graphics. Individual Training also includes all of our college, university, and OPM courses, which include the more complex engineering, technical and specialty courses.

D. NHTSA Totals $192,000

## REGIONAL OFFICE STAFFING AND GRANTS RESPONSIBILITY

Mr. CARR. Please update the data on regional office staffing and grants responsibility, as shown on pages 490 through 493 of last year's hearing record.

[The information follows:]

As of March 1994, the ten NHTSA regional offices are organized as follows:

Region 1 - Boston, Massachusetts
States: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont
Positions: 10 Full-Time Permanent Positions
FY 1994 402 Funds: $5,916,779
FY 1994 Estimated 153, 408, and 410 Funds: $1,502,173

Job Title and Grade

Regional Administrator (GM-15)
Regional Program Manager (GS-14)
Regional Program Manager (GS-13)
Regional Program Manager (GS-13)
Regional Program Manager (GS-13)
Regional Program Manager (GS-13)
Regional Program Manager (GS-13)
Regional Program Manager (GS-13)
Program Support Specialist (GS-11)
Secretary (GS-7)

Region 2 - White Plains, New York
States: New Jersey, New York, Puerto Rico, Virgin Islands
Positions: 7 Full-time Permanent Positions
FY 1994 402 Funds: $11,399,712
FY 1994 Estimated 153, 408, and 410 Funds: $4,962,808

Job Title and Grade

Regional Administrator (GM-15)
Regional Program Manager (GS-14)
Regional Program Manager (GS-14)
Regional Program Manager (GS-13)
Regional Program Manager (GS-13)
Regional Program Specialist (GS-11)
Secretary (GS-7)

Region 3 - Hanover, Maryland

| | |
|---|---|
| States: | Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia |
| Positions: | 7 Full-Time Permanent Positions |

FY 1994 402 Funds: $11,364,476
FY 1994 Estimated 153, 408, and 410 Funds: $5,403,554

Job Title and Grade

Regional Administrator (GM-15)
Regional Program Manager (GS-14)
Regional Program Manager (GS-14)
Regional Program Manager (GS-13)
Regional Program Manager (GS-13)
Highway Safety Specialist (GS-13)
Highway Safety Specialist (GS-11

Region 4 - Atlanta, Georgia

| | |
|---|---|
| States: | Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee |
| Positions: | 12 Full-Time Permanent Positions |

FY 1994 402 Funds: $20,301,171
FY 1994 Estimated 153, 408, and 410 Funds: $4,750,621

Job Title and Grade

Regional Administrator (GM-15)
Regional Program Manager (GS-14)
Regional Program Manager (GS-14)
Regional Program Manager (GS-14)
Regional Program Manager (GS-14)
Regional Program Manager (GS-13)
Regional Program Manager (GS-13)
Regional Program Manager (GS-13)
Regional Program Manager (GS-13)
Regional Program Manager (GS-11)
Program Assistant (GS-7)
Secretary (GS-7)

Region 5 - Homewood, Illinois
States: Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin
Positions: 9 Full-Time Permanent Positions
FY 1994 402 Funds: $20,839,287
FY 1994 Estimated 153, 408, and 410 Funds: $6,905,110

Job Title and Grade

Regional Administrator (GM-15)
Regional Program Manager (GS-14)
Regional Program Manager (GS-14)
Regional Program Manager (GS-14)
Regional Program Manager (GS-13)
Regional Program Manager (GS-13)
Regional Program Manager (GS-13)
Regional Program Manager (GS-12)
Secretary (GS-7)

Region 6 - Fort Worth, Texas
States: Arkansas, Louisiana, New Mexico, Oklahoma, Texas, Indian Nations
Positions: 8 Full-Time Permanent Positions
FY 1994 402 Funds: $14,547,073
FY 1994 Estimated 153, 408, and 410 Funds: $1,992,264

Job Title and Grade

Regional Administrator (GM-15)
Regional Program Manager (GS-14)
Regional Program Manager (GS-14)
Regional Program Manager (GS-13)
Regional Program Manager (GS-12)
Regional Program Manager (GS-12
Program Assistant (GS-7)
Secretary (GS-7)

Region 7 - Kansas City, Missouri
States: Iowa, Kansas, Missouri, Nebraska
Positions: 7 Full-Time Permanent Positions
FY 1992 402 Funds: $7,393,784
FY 1994 Estimated 153, 408, and 410 Funds: $3,713,722

Job Title and Grade

Regional Administrator (GM-15)
Regional Program Manager (GS-14)
Regional Program Manager (GS-13)
Regional Program Manager (GS-13)
Regional Program Manager (GS-12)
Regional Program Manager (GS-12)
Secretary (GS-7)

Region 8 - Denver, Colorado
States: Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming
Positions: 8 Full-Time Permanent Positions
FY 1994 402 Funds: $5,639,716
FY 1994 Estimated 153, 408, and 410 Funds: $2,066,164

Job Title and Grade

Regional Administrator (GM-15)
Regional Program Manager (GS-14)
Regional Program Manager (GS-13)
Regional Program Manager (GS-13)
Regional Program Manager (GS-13)
Regional Program Manager (GS-13)
Regional Program Manager (GS-12)
Secretary (GS-7)

Region 9 - San Francisco, California
States: Arizona, California, Hawaii, Nevada, American Samoa, Guam, Mariana Islands
Positions: 6 Full-Time Permanent Positions
FY 1994 402 Funds: $15,204,311
FY 1994 Estimated 153, 408, and 410 Funds: $12,907,095

Job Title and Grade

Regional Administrator (GM-15)
Regional Program Manager (GS-14)
Regional Program Manager (GS-14)
Regional Program Manager (GS-13)
Regional Program Manager (GS-13)
Program Assistant (GS-7)

Region 10 - Seattle, Washington
States: Alaska, Idaho, Oregon, Washington
Positions: 7 Full-Time Permanent Positions
FY 1992 402 Funds: $5,240,691
FY 1994 Estimated 153, 408, and 410 Funds: $2,084,184

Job Title and Grade

Regional Administrator (GM-15)
Regional Program Manager (GS-14)
Regional Program Manager (GS-14)
Regional Program Manager (GS-13)
Regional Program Manager (GS-13)
Regional Program Manager (GS-12)
Secretary (GS-7)

## OFFICE OF THE ADMINISTRATOR STAFFING

Mr. CARR. Please update the table, showing full-time positions and dollars for each of the offices under the Office of the Administrator account, as shown on page 494 of last year's hearing record, by providing data for fiscal years 1993 through 1995.

[The information follows:]

### OFFICE OF THE ADMINISTRATOR AND STAFF OFFICES
Positions and funding, fiscal year 1993-1995
(Dollars in Thousands)

| | 1993 | | 1994 | | 1995 | |
|---|---|---|---|---|---|---|
| | POSITION | FUNDING | POSITION | FUNDING | POSITION | FUNDING |
| Office of the Administrator | 4 | 337 | 4 | 362 | 4 | 386 |
| Deputy Administrator | 2 | 166 | 2 | 167 | 2 | 178 |
| Executive Director | 2 | 166 | 2 | 167 | 2 | 178 |
| Intergovernmental Affairs | 1 | 84 | 1 | 84 | 1 | 89 |
| International Harmonization | 2 | 166 | 2 | 167 | 2 | 178 |
| Executive Secretariat | 6 | 499 | 6 | 502 | 6 | 534 |
| Civil Rights | 4 | 336 | 4 | 338 | 4 | 360 |
| Public and Consumer Affairs | 12 | 1,003 | 12 | 1,021 | 12 | 1,088 |
| Chief Counsel | 30 | 2,501 | 30 | 2,521 | 30 | 2,684 |
| Less: Mission Support | -22 | (1,851) | -22 | (1,839) | -22 | (1,958) |
| Total | 41 | 3,407 | 41 | 3,490 | 41 | 3,717 |

## PERSONNEL STAFFING AND PC&B TABLES

Mr. CARR. Please update the personnel staffing and PC&B cost tables shown on page 494 of last year's hearing record by providing data for fiscal years 1991 through 1995.

[The information follows:]

## NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

### Full-time Permanent Positions by Program

| | Fiscal Year | | | | |
|---|---|---|---|---|---|
| | 1991 | 1992 | 1993 | 1994 | 1995 |
| Rulemaking | 93 | 93 | 95 | 95 | 95 |
| Enforcement | 103 | 103 | 103 | 103 | 96 |
| Highway Traffic Safety* | 186 | 209 | 208 | 208 | 208 |
| Research and Analysis* | 146 | 130 | 130 | 130 | 132 |
| Office of the Administrator and Staff Offices | 46 | 43 | 41 | 41 | 41 |
| General Administration | 91 | 91 | 91 | 90 | 90 |
| Full-time Permanent Positions, Total | 665 | 669 | 668 | 667 | 662 |

### Salaries and Benefits Costs by Program
(Dollars in Thousands)

| | Fiscal Year | | | | |
|---|---|---|---|---|---|
| | 1991 | 1992 | 1993 | 1994 | 1995 |
| Rulemaking | $5,791 | $6,312 | $6,555 | $6,557 | $6,833 |
| Enforcement | 6,414 | 6,991 | 7,106 | 7,109 | 6,905 |
| Highway Traffic Safety* | 11,582 | 14,186 | 14,351 | 14,355 | 14,934 |
| Research and Analysis* | 9,091 | 8,824 | 8,969 | 8,973 | 9,493 |
| Office of the Administrator and Staff Offices | 2,864 | 2,918 | 2,829 | 2,830 | 2,949 |
| General Administration | 5,667 | 6,177 | 6,279 | 6,211 | 6,473 |
| Salaries and Benefits, Total | 41,409 | 45,408 | 46,089 | 46,035 | 47,587 |

*In FY 1992, NHTSA transferred the Highway Safety Research activity, formerly under Research and Analysis Programs, to the Highway Safety Programs.

## OFFICE OF THE ADMINISTRATOR STAFFING

Mr. CARR. Please provide a listing showing the title and salary of each position under the Office of the Administrator account, by office, similar in format to what appears on page 496 of last year's hearing record.

[The information follows:]

*Office of the Administrator*

| | Amount |
|---|---|
| Administrator: | |
| Administrator | (1) |
| Special Assistant | (1) |
| Staff Assistant | (1) |
| Staff Assistant | $50,401 |
| Deputy Administrator: | |
| Deputy Administrator | 120,594 |
| Secretary | 37,213 |
| Executive Director: | |
| Executive Director | 120,594 |
| Secretary | 27,623 |
| Director of International Harmonization: | |
| General Engineer | 90,262 |
| Secretary | 29,721 |
| Executive Secretariat: | |
| Supervisory Correspondence Analyst | 39,340 |
| Correspondence Analyst | 26,834 |
| Correspondence Analyst | 28,412 |
| Correspondence Analyst | 23,167 |
| Correspondence Analyst | (1) |
| Correspondence Clerk | 19,669 |
| Office of Civil Rights: | |
| Supervisory Equal Opportunity Specialist | 74,054 |
| Equal Opportunity Specialist | 76,733 |
| Equal Opportunity Specialist | 32,825 |
| Secretary | 27,253 |
| Office of Public and Consumer Affairs: | |
| Director | (1) |
| Supervisory Public Affairs Specialist | 90,252 |
| Secretary | 29,201 |
| Media Relations Division: | |
| Supervisory Public Affairs Specialist | 71,716 |
| Public Affairs Specialist | 53,276 |
| Public Affairs Specialist | 44,393 |
| Public Affairs Assistant | 34,094 |
| Consumer Information Division: | |
| Chief | 69,427 |
| Writer Editor | 49,002 |
| Public Affairs Specialist | 44,802 |
| Public Affairs Specialist | 36,214 |
| Public Affairs Specialist | 28,964 |
| Office of Intergovernmental Affairs: | |
| Director | (1) |

[1] Vacant

## CONSUMER INFORMATION DIVISION RESPONSIBILITIES

Mr. CARR. What are the responsibilities of the Consumer Information Division and how do they differ from those of the Office of Public and Consumer Affairs?

[The information follows:]

The Office of Public and Consumer Affairs is the overall entity that contains two divisions, the Consumer Information Division and the Media Relations Division. The Media Relations Division handles the approximately 200 media calls we receive each week, drafts news releases, speeches, fact sheets, statements and other media materials. The Consumer Information Division provides creative direction to the administrator and agency staff offices in the creation of mass media communication materials. It manages the agency's two Ad Council national campaigns ("Vince and Larry" and anti-drunk driving); builds relationships with national and local consumer organizations; plans and manages national media events to promote highway and motor vehicle safety and designated safety theme weeks, such as "Drunk & Drugged Driving Prevention Month"; provides creative direction for all agency consumer publications; produces consumer fact sheets on popular highway and motor vehicle safety topics; works to promote the agency's major consumer programs, such as the New Car Assessment Program and the Auto Safety Hotline; and compiles the agency's statutory annual reports to the Congress.

The two divisions complement each other with Media Relations handling the day-to-day news inquiries and Consumer Information providing longer-range communications direction for the agency's safety and consumer information programs.

## POLITICAL APPOINTEES

Mr. CARR. Please update the listing of NHTSA political appointees, including the position, title, type of appointment, and salary, similar to data shown on page 497 of last year's hearing record. Please provide data for fiscal years 1992 through 1994.

[The information follows:]

| Title | Type of appointment | Salary |
|---|---|---|
| Fiscal Year 1992: | | |
| Deputy Administrator | Non Career SES | 94,400 |
| Chief Counsel | Non Career SES | 104,000 |
| Special Assistant | Excepted | 56,427 |
| Special Assistant | Excepted | 49,290 |
| Director, Office, Public and Consumer Affairs | Excepted | 68,515 |
| Chief, Consumer Affairs Division | Excepted | 58,967 |
| Fiscal Year 1993—On Board 10/92 to 9/93: | | |
| Chief Counsel | Non Career SES | 104,000 |
| Special Assistant | Excepted | 58,247 |
| Director, Office, Public and Consumer Affairs | Excepted | 70,656 |
| Chief, Consumer Affairs Division | Excepted | 60,787 |
| Fiscal Year 1994—On board 10/93 or 3/94: | | |
| Deputy Administrator | Non Career SES | 120,594 |
| Chief, Consumer Affairs Division | Excepted | 66,609 |

## SCHEDULE C APPOINTEES

Mr. CARR. Please update for the record the listing of Schedule C appointees currently on board.

[The information follows:]

NHTSA currently has the following schedule C appointee on board:
Hart, Christopher A.—Deputy Administrator, Non Career SES
Klass, Kathleen J.—Chief, Consumer Affairs Division, GS–301–15

## NHTSA STAFFING

Mr. CARR. Please provide a table which breaks out for each NHTSA office the number of positions and number of FTES allocated in each of fiscal years 1990 through 1995, similar in format to the table on page 144 of Senate Report 103–150.

[The information follows:]

## AUTHORIZED FTP/FTE BY FISCAL YEAR

| | FTP | | | | | | | FTE* | |
|---|---|---|---|---|---|---|---|---|---|
| | 1990 | 1991 | 1992 | | 1993 | 1994 | 1995 | 1994 | 1995 |
| Rulemaking | 92 | 93 | 93 | | 95 | 95 | 95 | 92.6 | 92.6 |
| Enforcement | 101 | 103 | 103 | | 103 | 103 | 96 | 102.5 | 95.5 |
| Highway Safety Research | 180 | 186 | 209 | ** | 208 | 208 | 208 | 210.0 | 210.0 |
| Research and Analysis | 146 | 146 | 130 | ** | 130 | 130 | 132 | 128.4 | 129.4 |
| Office of the Administrator & Staff Offices | 46 | 46 | 43 | | 41 | 41 | 41 | 41.6 | 41.6 |
| General Administration | 91 | 91 | 91 | | 91 | 90 | 90 | 96.2 | 96.2 |
| Subtotal | 656 | 665 | 669 | | 668 | 667 | 662 | 671.3 | 665.3 |
| Cumulative Reduction per Executive Order | 0 | 0 | 0 | | 0 | 0 | 0 | (7.0) | (17.0) |
| Total | 656 | 665 | 669 | | 668 | 667 | 662 | 664.3 | 648.3 |

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*The authorized FTE levels by NHTSA office were first provided in the Senate Report (103–150) to the 1994 DOT Appropriations Act and subsequently changed by Conference action.

**Reflects transfer of the Highway Safety Research activity from Research and Analysis to Highway Safety Programs.

## UNOBLIGATED CARRYOVER BALANCE

Mr. CARR. Please also update the breakdown of the unobligated balance carried forward into fiscal year 1994, similar in format to that appearing on pages 498 through 499 of last year's hearing record.

[The information follows:]

In the Operations and Research appropriation, an unobligated balance of $12.4 million was brought forward, together with $1.4 million of recoveries, and made available for use in FY 1994. Most of the carryover ($9 million) was reserved for three activities: the NDR program ($1 million), the Simulator program ($7 million) and salaries and benefits ($1 million). The following is a listing of unobligated funds:

*Operations and research—carryover of unobligated funds into fiscal year 1994*

[In thousands of dollars]

| | |
|---|---|
| Contract Program: | |
| Rulemaking | $276 |
| Enforcement | 43 |
| Highway Safety: | |
| NDR | 997 |
| Other | 26 |
| Highway Safety | 1,023 |
| Research and Development: | |
| Simulator | 7,057 |
| Other | 1,519 |
| Research and Development | 8,576 |
| General Administration | 965 |
| Salaries and Benefits | 1,001 |
| Miscellaneous Operating Expenses | 503 |
| Recoveries | 1,401 |
| Total | 13,778 |

Rulemaking—($276 thousand)—Carryover for the New Car Assessment Program.

Enforcement—($43 thousand)—Carryover associated with a variety of enforcement activities.

Highway Safety Programs—($1.023 million)—Ninety-eight percent ($997 thousand) is earmarked for the NDR program and the remaining $26 thousand is associated with various Highway Safety contracts.

Research and Development—($8.576 million)—Eighty-two percent ($7.057 million) is earmarked for the simulator program and the remaining $1.519 million is associated with a variety of programs, including the Longer Combination Vehicle program, the National Accident Sampling System, and Technology Transfer.

General Administration—($965 thousand)—Plans and Policy carryover resulted primarily from a delay in Program Evaluation contracts ($207 thousand). Administration's carryover resulted from communications costs associated with postponement of a Safety campaign and lower costs from the transition to FTS 2000 ($275 thousand), delay of an IRM activity ($125 thousand), and the remaining $358 thousand was primarily derived from a variety of line items in the Working Capital Fund. All of these funds will be obligated in FY 1994.

Salaries and Benefits—($1.001 million)—This amount resulted from economies realized from a hiring freeze and vacancies in higher level positions. This amount will be applied to the cost of the locality pay increase effective January 1994.

Miscellaneous Operating Expenses—($503 thousand)—This amounts comprises carryover from field and headquarters travel and operating expenses.

Recoveries—($1.401 million)—Contract underruns from a variety of program areas and other deobligations from prior years (FY 1992 and before).

## NHTSA CONTRACTORS

Mr. CARR. Please update the information on the 25 largest NHTSA contractors found on pages 500 through 502 of last year's hearing record.

[The information follows:]

## NHTSA 25 LARGEST DOLLAR VALUE CONTRACTORS IN FY 93

| RANK | CONTRACTOR | NUMBER OF ACTIONS* | DOLLARS* |
|---|---|---|---|
| 1 | INFORMATION SYSTEMS AND SERVICES, INC.<br>Metro Plaza 2<br>8403 Colesville Road, Suite 750<br>Silver Spring, Maryland 20910 | 15 | $ 3,226,411 |
| 2 | INFORMATION MANAGEMENT CONSULTANTS<br>7915 Westpark Drive<br>McLean, Virginia 22102 | 31 | 2,778,170 |
| 3 | UNIVERSITY OF MICHIGAN<br>475 East Jefferson<br>Ann Arbor, Michigan 48109-1248 | 6 | 2,709,497 |
| 4 | CALSPAN CORPORATION<br>Post Office box 400<br>Buffalo, New York 14225 | 28 | 2,470,765 |
| 5 | JACKSON MEMORIAL HOSPITAL<br>1611 North W. 12th Avenue<br>Miami, Florida 33136 | 1 | 2,250,000 |
| 6 | KHRI, INC.<br>1516 E. Hillcrest Street<br>Suite 200<br>Orlando, Florida 32802 | 51 | 1,960,244 |
| 7 | FRONTIER ENGINEERING<br>Post Office Box 1023<br>Stillwater, OK 74076-1023 | 3 | 1,663,164 |
| 8 | UNIVERSITY OF IOWA<br>Division of Sponsored Programs<br>100 Gilmore Hall<br>Iowa City, Iowa 52242 | 4 | 1,434,000 |
| 9 | CARNEGIE MELLON UNIVERSITY<br>School of Computer Science<br>5000 Forbes Avenue<br>Pittsburgh, PA 15213-3890 | 2 | 1,394,205 |

| NK | CONTRACTOR | NUMBER OF ACTIONS* | DOLLARS* |
|---|---|---|---|
| 10 | STATE OF NEW JERSEY<br>DIVISION OF HIGHWAY TRAFFIC SAFETY<br>CN048, Quakerbridge Plaza<br>Building 5, Room 315<br>Trenton, New Jersey 08625-0048 | 3 | 998,971 |
| 11 | INTERNATIONAL ASSOCIATION<br>OF CHIEFS OF POLICE<br>1110 North Glebe Road, Suite 200<br>Arlington, Virginia 22201 | 9 | 992,076 |
| 12 | KLD ASSOCIATES, INC.<br>300 Broadway<br>Huntington Station, New York 11746 | 19 | 930,164 |
| 13 | MOBILITY SYSTEMS AND EQUIPMENT COMPANY<br>6151 West Century Boulevard<br>Los angeles, California 90045 | 24 | 764,502 |
| 14 | BATTELLE HUMAN AFFAIRS<br>505 King Avenue<br>Columbus, Ohio 43201-2693 | 10 | 761,995 |
| 15 | NATIONAL CAPITAL SYSTEMS, INC.<br>5205 Leesburg Pike #400<br>Falls Church, Virginia 22041 | 10 | 759,808 |
| 16 | MID-AMERICA RESEARCH INSTITUTE<br>611 Main Street<br>Winchester, Massachusetts 01890 | 8 | 747,408 |
| 17 | INFORMATION DYNAMICS, INC.<br>600 Maryland Avenue, S.W.<br>Suite 308E<br>Washington, D.C. 20024 | 5 | 742,523 |
| 18 | AMERICAN ASSOCIATION OF<br>MOTOR VEHICLE ADMINISTRATORS<br>1201 Connecticut Avenue, NW<br>Suite 910<br>Washington, D.C. 20036 | 2 | 673,000 |

| NK | CONTRACTOR | NUMBER OF ACTIONS* | DOLLARS* |
|---|---|---|---|
| 19 | MEDICAL COLLEGE OF WISCONSIN<br>Post Office Box 26509<br>8701 Watertown Plank Road<br>Milwaukee, Wisconsin 53226 | 2 | 667,479 |
| 20 | INDIANA UNIVERSITY<br>355 North Lansing Street<br>Indianapolis, Indiana | 5 | 637,803 |
| 21 | ADVANCED SYSTEMS DEVELOPMENT, INC.<br>2800 Shirlington Road<br>Arlington, Virginia 22206 | 4 | 612,913 |
| 22 | DEVELOPMENT ASSISTANCE CORPORATION<br>1415 11th Street, NW<br>Washington, DC 20001 | 8 | 608,900 |
| 23 | GLOBAL EXCHANGE, INC.<br>37 South Detroit Street<br>Xenia, Ohio 45385 | 14 | 579,969 |
| 24 | SOUTHWEST RESEARCH INSTITUTE<br>6200 Culebra Road<br>San Antonio, Texas 78238 | 4 | 539,275 |
| 25 | CONRAD TECHNOLOGIES, INC.<br>10 Valley Stream Parkway<br>Malvern, PA 19355 | 2 | 529,678 |
|  |  | GRAND TOTAL | $31,432,920 |

* New Contracts and Funding Modifications

## OTHER PERSONNEL COSTS

Mr. CARR. Please update the office-by-office breakdown of "other personnel" costs, similar to that shown on page 504 of last year's hearing record, by deleting 1990 and adding an estimate for 1995.

[The information follows:]

(In thousands of dollars)

| | 1991 | 1992 | 1993 | 1994 | 1995 |
|---|---|---|---|---|---|
| Rulemaking | | | | | |
| Overtime | 0 | 0 | 3 | 3 | 3 |
| Terminal Leave | 12 | 1 | 1 | 1 | 1 |
| Awards | 39 | 55 | 58 | 60 | 61 |
| Subtotal | 51 | 56 | 62 | 64 | 65 |
| Enforcement Program | | | | | |
| Overtime | 33 | 37 | 19 | 20 | 20 |
| Terminal Leave | 26 | 14 | 19 | 20 | 20 |
| Awards | 52 | 58 | 72 | 75 | 76 |
| Subtotal | 111 | 109 | 110 | 115 | 116 |
| Highway Safety Program | | | | | |
| Overtime | 1 | 11 | 6 | 6 | 6 |
| Terminal Leave | 5 | 45 | 71 | 74 | 75 |
| Awards | 63 | 191 | 178 | 186 | 189 |
| Subtotal | 69 | 247 | 255 | 266 | 270 |
| Research and Analysis | | | | | |
| Overtime | 1 | 1 | 0 | 0 | 0 |
| Terminal Leave | 50 | 5 | 46 | 48 | 49 |
| Awards | 44 | 118 | 83 | 87 | 88 |
| Subtotal | 95 | 124 | 129 | 135 | 137 |
| Office of the Administrator | | | | | |
| Overtime | 4 | 8 | 7 | 7 | 7 |
| Terminal Leave | 61 | 13 | 20 | 21 | 21 |
| Awards | 42 | 68 | 55 | 57 | 58 |
| Subtotal | 107 | 89 | 82 | 85 | 86 |
| General Administration | | | | | |
| Overtime | 49 | 55 | 55 | 57 | 58 |
| Terminal Leave | 5 | 8 | 33 | 34 | 35 |
| Awards | 68 | 115 | 114 | 119 | 121 |
| Subtotal | 122 | 178 | 202 | 210 | 214 |
| Grand Total | | | | | |
| Overtime | 88 | 112 | 90 | 93 | 94 |
| Terminal Leave | 159 | 85 | 190 | 198 | 201 |
| Awards | 308 | 606 | 560 | 584 | 593 |
| Subtotal | 555 | 803 | 840 | 875 | 888 |

FY 1993 Actual Obligations

FY 1994 Estimated Obligations (4.23% increase over 1993)

FY 1995 Estimated Obligations (1.6% over 1994)

## RECRUITMENT AND RETENTION BONUSES

Mr. CARR. Please provide for the record your estimated allocation for recruitment and retention bonuses in fiscal year 1994 and the planned allocation for fiscal year 1995.

[The information follows:]

The National Highway Traffic Safety Administration did not allocate funds for recruitment and retention bonuses in fiscal year 1994, and does not intend to do so in fiscal year 1995.

## SES POSITIONS

Mr. CARR. Please provide a listing of all SES positions by position, title, and grade.

[The information follows:]

| Position: | *Grade* |
|---|---|
| Deputy Administrator | 6 |
| Executive Director | 6 |
| Chief Counsel | 5 |
| Senior Assistant Chief Counsel | 2 |
| Assistant Chief Counsel (Rulemaking) | 4 |
| Assistant Chief Counsel (Litigation) | 4 |
| Associate Administrator for Plans and Policy | 5 |
| Director, Office of Regulatory Analysis | 3 |
| Director, Office of Budget & Policy Development | 2 |
| Director, Office of Strategic Planning & Evaluation | 4 |
| Associate Administrator for Administration | 5 |
| Associate Administrator for Traffic Safety Programs | 5 |
| Director, Office of Alcohol and State Programs | 4 |
| Director, Office of Occupant Protection | 4 |
| Director, Office of Driver & Pedestrian Research | 4 |
| Chief, Problem-Behavior Research Division | 4 |
| Associate Administrator for Regional Operations | 5 |
| Associate Administrator for Research & Development | 5 |
| Special Assistant for Technology Transfer Policy & Programs | 4 |
| Director, Office of Crashworthiness Research | 4 |
| Director, Office of Crash Avoidance Research | 4 |
| Director, National Center for Statistics and Analysis | 4 |
| Chief, Accident Investigation Division | 4 |
| Director, Vehicle Research and Test Center | 4 |
| Associate Administrator for Rulemaking | 5 |
| Director, Office of Vehicle Safety Standards | 3 |
| Director, Office of Market Incentives | 4 |
| Associate Administrator for Enforcement | 5 |
| Director, Office of Defects Investigation | 2 |
| Director, Office of Vehicle Safety Compliance | 4 |

## SES BONUS AWARDS

Mr. CARR. Please update the listing of SES bonus awards shown on page 506 of last year's hearing record by providing data for 1990 through 1994.

[The information follows:]

| | |
|---|---|
| Fiscal Year 1990: | |
| Howard Smolkin, Executive Director | $7,200 |
| Kenneth Weinstein, Assistant Chief Counsel (Litigation) | 4,520 |
| Donald Bischoff, Associate Administrator for Plans and Policy | 6,820 |
| Michael Brownlee, Associate Administrator for Traffic Safety Programs | 4,520 |
| George Parker, Assocaite Administrator for Research and Development | 4,640 |
| Barry Felrice, Associate Administrator for Rulemaking | 7,020 |
| William Boehly, Associate Administrator for Enforcement | 4,520 |
| Adele Derby, Associate Administrator for Regional Operations | 7,020 |
| Total | 46,260 |

| | |
|---|---|
| Fiscal Year 1991: | |
| Howard Smolkin, Executive Director | 5,957 |
| Barbara Kernan, Associate Administrator for Administration | 5,754 |
| Kenneth Weinstein, Assistant Chief Counsel (Litigation) | 5,528 |
| Donald Bischoff, Associate Administrator for Plans and Policy | 12,553 |
| Michael Brownlee, Associate Administrator for Traffic Safety Programs | 5,754 |
| James Nichols, Director, Office of Occupant Protection | 8,342 |
| George Parker, Associate Administrator for Research and Development | 5,754 |
| Barry Felrice, Associate Administrator for Rulemaking | 5,754 |
| William Boehly, Associate Administrator for Enforcement | 5,754 |
| Adele Derby, Associate Administrator for Regional Operations | 12,553 |
| Total | 73,703 |
| Fiscal Year 1992: | |
| Howard Smolkin, Executive Director | 9,080 |
| William Boehly, Associate Administrator for Enforcement | 8,772 |
| Donald Bischoff, Associate Administrator for Plans and Policy | 5,523 |
| Barry Felrice, Associate Administrator for Rulemaking | 5,523 |
| Adele Derby, Associate Administrator for Regional Operations | 5,523 |
| Michael Brownlee, Associate Administrator for Traffic Safety Programs | 5,523 |
| James Hedlund, Director, Office of Alcohol and State Programs | 5,304 |
| James Nichols, Director, Office of Occupation Protection | 5,304 |
| Kenneth Weinstein, Assistant Chief Counsel (Litigation) | 5,304 |
| William Leasure, Director, Office of Crash Avoidance Research | 5,304 |
| Robert Shelton, Director, Office of Regulatory Analysis | 4,590 |
| William Walsh, Director, National Center for Statistics and Analysis | 5,304 |
| Stephen Wood, Assistant Chief Counsel (Rulemaking) | 5,304 |
| Total | 76,358 |
| Fiscal Year 1993: | |
| William Boehly, Associate Administrator for Enforcement, | 6,708 |
| Adele Derby, Associate Administrator for Regional Operations | 5,590 |
| Barry Felrice, Associate Administrator for Rulemaking | 5,590 |
| Willie Gilmore, Director, Office of Budget & Policy Development | 4,645 |
| James Hedlund, Director, Office of Alcohol and State Programs | 5,365 |
| William Leasure, Director, Office of Crash Avoidance Research | 5,365 |
| Howard Smolkin, Executive Director | 5,785 |
| George Parker, Associate Administrator For Research & Development | 5,590 |
| Total | 44,638 |

## PERMANENT CHANGE OF STATION MOVES

Mr. CARR. Please update the data on permanent change-of-station moves as shown on page 508 of last year's hearing record.

[The information follows:]

### PERMANENT CHANGE OF STATION DATA

| Fiscal year moves | Amount budgeted | Number of moves | Average cost per move |
|---|---|---|---|
| 1990 | $200,000 | 10 | $18,535 |
| 1991 | 200,000 | 3 | 15,733 |
| 1992 | 200,000 | 1 | 3,000 |
| 1993 | 120,000 | 1 | 31,000 |
| 1994 est. | 60,000 | 3 | 20,000 |

## AUTHORIZING LEGISLATION

Mr. CARR. Please identify any components of your budget request for fiscal year 1995 which lack authorizing legislation or are contingent on the passage of new authorizing legislation.

[The information follows:]

The budget includes a request to continue funding authority for the National Driver Register program. Continuation is requested for fiscal year 1995 because funding authority was only provided through fiscal year 1994 by Section 2007 of the Intermodal Surface Transportation Efficiency Act of 1991. [Section 2007 of ISTEA amended Section 211(b) of the National Driver Register Act of 1982.] As part of the fiscal year 1995 budget, a request is made to amend Section 211(b) of the National Driver Register Act in order to authorize $2.55 million of new authority. This new authority plus the planned carryover of unused authority of $850 thousand will support an obligation level of $3.4 million in fiscal year 1995 as requested.

The request for new authority is proposed as Section 320 of the General Provisions to be included in the Department of Transportation and Related Agencies Appropriations Act of 1995. [See FY 1995 Budget Appendix, page 710.]

## U.S. INTERNATIONAL SAFETY RANKING

Mr. CARR. Last year, NHTSA reported that the annual number of highway deaths continued a four-year decline, dropping to 39,235 fatalities in 1992. This year, your preliminary 1993 data indicate a slight increase in the number of fatalities to 39,850 fatalities.

I have seen some data that suggest that in comparison to the highway safety performance of other countries, we could be doing much better. When one looks at fatality per population ratios, a number of countries like Australia, West Germany, Italy, Japan, and Great Britain look better than the U.S. Tell us how the U.S. ranks internationally on comparisons of fatalities per population, and fatalities per vehicle miles travelled.

[The information follows:]

The following tables show that in 1992 the United States has the lowest fatality rate by Vehicle Kilometer of Travel, however, Norway has the lowest fatality rate per population. The United States ranks 12th per population.

## HIGHWAY FATALITIES PER 100 MILLION VEHICLE KILOMETERS TRAVELED FOR SELECTED COUNTRIES

| | 1989 FATALITY RATE | 1990 FATALITY RATE | 1991 FATALITY RATE | 1992 FATALITY RATE |
|---|---|---|---|---|
| AUSTRIA | 3.5(4) | 3.4 | 3.2 | 2.9 |
| BELGIUM | 3.7 | N/A | 3.3 | N/A |
| DENMARK | 1.9 | 1.7 | 1.6 | 1.5 |
| FINLAND | 1.9 | 1.6 | 1.6 | 1.4 |
| FRANCE | 2.5(3) | 2.4(3) | 2.2 | 2.0 |
| GERMANY (FEDERAL REPUBLIC) | 1.8 | 1.7 | 2.1 | 1.9 |
| GREAT BRITAIN | 1.7 | N/A | 1.1 | N/A |
| IRELAND | 1.9 | 1.9 | 1.8 | 1.5 |
| ITALY | 1.8 | 1.7 | 1.9 | N/A |
| JAPAN | 1.9(2) | 1.9(2) | 1.8 | 1.7 |
| MEXICO | 9.8 | 10.0 | N/A | N/A |
| NETHERLANDS | 1.5(1) | 1.4(1) | 1.3 | 1.3 |
| NORWAY | N/A | 1.2 | 1.2 | 1.2 |
| SPAIN | 6.8(2) | N/A | N/A | 4.8(2) |
| SWEDEN | 1.4 | 1.2 | 1.0 | N/A |
| TURKEY | 24 | 23 | 24 | 22 |
| UNITED STATES | 1.3 | 1.3 | 1.2 | 1.1 |

SOURCE: "Statistics of Road Traffic Accidents in Europe" (United Nations)
"World Road Statistics" (International Road Federation)

N/A – Not Available

(1) Excludes Cyclists
(2) Deaths within 24 hours
(3) Deaths within 6 days
(4) Deaths within 3 days

Note: VMT used to compute rates are based on estimates of varing degree of accuracy. They should therefore be regarded rather as order of magnitude than as precise statistics.

## HIGHWAY FATALITIES PER 100,000 POPULATION FOR SELECTED COUNTRIES

| | 1990 Fatality Rate | 1991 Fatality Rate | 1992 Fatality Rate |
|---|---|---|---|
| Austria | 18.20 | 17.74 | 15.94 |
| Australia | 13.68 | 12.22 | N/A |
| Belgium | 19.94 | 18.88 | 16.72 |
| Canada | 14.91 | 13.73 | N/A |
| Denmark | 12.36 | 11.81 | 11.14 |
| Finland | 13.04 | 12.66 | 11.92 |
| France | 18.26 | 16.99 | 15.83 |
| Germany | 12.50 | 11.74 | 13.19 |
| Greece | 17.32 | 17.82 | N/A |
| Hungary | 23.01 | 20.08 | 20.36 |
| Ireland | 13.66 | 12.75 | 11.67 |
| Italy | 11.48 | 12.98 | N/A |
| Japan | 9.09 | 8.95 | N/A |
| Mexico | 6.25 | 6.33 | N/A |
| Netherlands | 9.17 | 8.53 | 8.47 |
| New Zealand | 22.15 | 19.64 | N/A |
| Norway | 7.81 | 7.56 | 7.55 |
| Poland | 19.41 | 20.90 | 18.11 |
| Portugal | 22.42 | 23.83 | 22.74 |
| Romania | 16.25 | 13.16 | 12.38 |
| Spain | 17.69 | 17.26 | 15.39 |
| Sweden | 9.05 | 8.70 | 8.74 |
| Switzerland | 14.15 | 12.68 | 12.09 |
| Turkey | 10.97 | 10.68 | 10.53 |
| United Kingdom | 9.42 | 8.26 | 7.57 |
| U.S.A. | 17.88 | 16.27 | 15.38 |

Source: "Statistics of Road Traffic Accidents in Europe"
(United Nations)
"World Road Statistics"
(International Road Federation)

## LEADING FATALITY CRASH MODES

Mr. CARR. In previous years, the majority of highway fatalities have occurred due to front, side and rollover crashes. Can you comment on whether this is still the case?

[The information follows:]

The following table shows that the majority of highway occupant fatalities (approximately 78 percent) do occur in front, side and rollover crashes with the highest number of occupant fatalities (approximately 42 percent) occurring in frontal collisions.

### MOTOR VEHICLE OCCUPANT FATALITIES BY CRASH TYPE

[Point of Impact]

| Impact point | 1990 | 1991 | 1992 |
|---|---|---|---|
| Front | 15,634 | 14,433 | 13,736 |
| Side | 10,163 | 9,797 | 9,086 |
| Rollover | 8,791 | 8,225 | 7,919 |
| Rear | 990 | 891 | 872 |
| Unknown | 1,556 | 1,394 | 1,256 |
| Total occupant fatalities | 37,134 | 34,740 | 32,869 |
| Total fatalities | 44,599 | 41,508 | 39,235 |

## EFFECTIVENESS OF CRASH AVOIDANCE VS. CRASHWORTHINESS

Mr. CARR. Also, can you comment on the extent to which traffic fatalities are due to driver error and behavior, as compared with vehicle and highway design, and the potential that you see for further improvements stemming from crash avoidance versus crashworthiness strategies?

[The information follows:]

In one major study (the Indiana Tri-Level Study), driver errors were cited as contributing causal factors in 93 percent of crashes. In contrast, environmental factors and vehicle factors were cited 34 percent and 13 percent, respectively. These percentages add to more than 100 since more than one factor could be cited. Human error and behavior, including both unsafe driving acts (e.g., alcohol, reckless driving) and inadvertent errors (e.g., "looked but did not see"), are also cited as the primary contributing factors in most fatal crashes. Although "human error" is a predominant crash contributing factor, changes in vehicle design can affect the probability of human error, and thus crash involvement. Improvements to standard vehicle design features (e.g., lights, signals, displays, controls) as well as the introduction of advanced-technology collision avoidance systems can significantly reduce certain crash types, although the systems must be introduced prudently. Over the past 20 years, the technology has been available to make significant progress in improving the crashworthiness and occupant protection of motor vehicles, and the improvements have been impressive. Today, IVHS offers the opportunity to make significant additional gains in the crash avoidance area. Since both areas are likely to yield significant safety payoffs, both areas should be pursued vigorously. No matter how successful the crash avoidance program is, crashes will occur, and there is a need to provide as much protection as practicable.

## LEADING CAUSES OF DEATH/PREMATURE DEATH

Mr. CARR. Last year, we talked about the fact that in 1989 highway fatalities were the fourth leading cause of death in the United States after heart diseases, cancer and pulmonary diseases, and the fifth leading cause of premature deaths. Would you update us on the most recent statistics?

[The information follows:]

The following table shows the fifteen leading causes of death for the U.S. in 1991, the most recent data available from the National Center for Health statistics. Deaths from motor vehicle traffic crashes rank eighth, after heart disease, cancer, cerebrovascular diseases, pulmonary diseases, pneumonia, diabetes, and non-transport accidents.

### The 15 Leading Causes of Death (1)
### All Ages, All Races and Both Sexes
### United States, 1991

| Cause of Death | Number of Deaths | Percent of Total | Rank |
|---|---|---|---|
| Diseases of the Heart | 720,862 | 33.3 | 1 |
| Maligant Neoplasms (Cancer) | 514,657 | 23.7 | 2 |
| Cerebrovascular Diseases | 143,481 | 6.6 | 3 |
| Chronic Obstructive Pulmonary Diseases | 90,650 | 4.2 | 4 |
| Pneumonia | 76,723 | 3.5 | 5 |
| Diabetes Mellitus | 48,951 | 2.2 | 6 |
| Nontransport Accidents | 43,050 | 2.0 | 7 |
| Motor Vehicle Traffic Accidents | 42,621 | 2.0 | 8 |
| Suicide | 30,810 | 1.4 | 9 |
| Human Immunodeficiency Virus Infection (HIV) | 29,555 | 1.4 | 10 |
| Homicide and Legal Intervention | 26,513 | 1.2 | 11 |
| Chronic Liver Disease and Cirrhosis | 25,429 | 1.2 | 12 |
| Symptoms, Signs and Ill-Defined Conditions | 24,342 | 1.1 | 13 |
| Nephritis, Nephrotic Syndrome and Nephrosis | 21,360 | 1.0 | 14 |
| Septicemia | 19,691 | 0.9 | 15 |
| All Other Causes | 310,823 | 14.3 | |
| TOTAL DEATHS, ALL CAUSES | 2,169,518 | 100.0 | |

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(1) Deaths of residents of the U.S. only.

Source: National Center for Health Statistics

## ADMINISTRATION PRIORITIES FOR NHTSA

Mr. CARR. Now that we have reviewed the fatality statistics, I would like to raise some questions about your strategic goals for addressing highway safety. Deputy Administrator Hart, this is your first appearance before the subcommittee in your new capacity. I know that you have just recently been officially appointed, but we are well aware of your work on important transportation safety issues during your tenure as a member of the National Transportation Safety Board. I would like to get your comments on where you see the agency headed and what some of your priorities will be over the next several years.

[The information follows:]

You are right that I was only recently appointed. I am learning a lot about how the much broader program of the National Highway Traffic Safety Administration works. It includes vehicle and human behavior research, development, and demonstration; regulatory and enforcement programs; technical assistance and grants; consumer programs; and more. By comparison, the National Transportation Safety Board is primarily concerned with investigation and analysis of transportation accidents.

Also, since I am the Deputy Administrator, I will look to the strategic direction of our new Administrator who we expect to be on board in the near future. Because of his medical background, we expect that he will stress the public health and epidemiological aspects of the agency's programs.

I am highly committed to the safety mandate of the NHTSA and believe that its mix of education, enforcement, and engineering approaches is approximately correct and appropriate to meet the nation's highway safety challenges. As you are aware, NHTSA is completing a strategic planning process that will help to set a future direction for the agency, and I am very much a contributor to and supporter of this planning activity.

## STRATEGIC PLAN—STATUS AND CONTENT

Mr. CARR. Last year, NHTSA indicated that the agency would complete a long range strategic plan, based on demographic, economic, institutional, and technological forecasts related to highway safety into the 21st Century. Can you tell us whether you have completed your strategic plan; what it contains; and how it will complement the strategic plan for the Department of Transportation announced earlier this year by the Secretary?

[The information follows:]

The agency has not yet completed its strategic plan and therefore cannot tell you what it will contain. It was delayed due to the agency's participation in the National Performance Review (NPR) and because we wanted to ensure that our new leadership had an opportunity to participate in its development. The plan should be released this summer.

The Department's strategic plan has several elements that directly concern NHTSA. Perhaps the most important to us is Goal 4.1 concerning safety. That goal contains the vast majority of NHTSA's program. Since the initial printing of the plan, that goal has been restated as follows:

Implement a comprehensive strategy toward ending death and injury on the highways with significant public outreach and education; aggressive enforcement; promotion of new safety technology; advanced public health strategies and techniques; collaboration with safety and business organizations; and cooperation with state and local governments.

NHTSA's strategic plan will be fully consistent with this Departmental goal. In addition, the Department's plan calls for development of the Intelligent Vehicle/Highway System (IVHS). The agency's plan will support this with crash avoidance research into the application of computers, sensors, communications systems, and global positioning to the problem of safe vehicle operation and control. NHTSA's IVHS program is looking toward cooperation with industry in establishing standardized test procedures and operating protocols for these systems and assessing the safety implications of all IVHS technologies.

Finally, the agency's organizational, management, and customer service reforms will be fully consistent with Goal 7 of the Departmental plan which encompasses much of what was developed in the NPR last year. We were strong participants in NPR, and look forward to making a number of improvements in the ways we do business.

### STRATEGIC PLAN—FLEXIBILITY FOR AUTO MANUFACTURERS

Mr. CARR. The Vice President's National Performance Review included a recommendation that the Department of Transportation "encourage innovations in automotive safety." I understand that part of your strategic planning process has involved looking at ways in which the automobile manufacturers might be given more flexibility in meeting safety standards, particularly in order to stimulate technological innovations that might result in improved safety. Can you elaborate on what the agency is considering?

[The information follows:]

At present, the Safety Act authorizes NHTSA to grant exemptions from the safety standards to vehicles that contain new safety features on a finding that the features provide a level of safety equivalent to that established in the applicable Federal Motor Vehicle Safety Standards (FMVSS), that they have low emission characteristics, or that the vehicles overall safety is equivalent to the level established in the FMVSS. These exemptions, however, are limited to 2,500 vehicles a year and cannot last for more than two years. The NPR has recommended that legislative changes be made to the Safety Act to make the exemption a more attractive mechanism for encouraging safety innovations.

To ensure that all factors relevant to expanding the exemption are thoroughly examined, the agency's Strategic Planning Division formed a working group consisting of staff from Rulemaking, Chief Counsel, and Research and Development. The working group is considering several relevant issues. These issues include: (1) increasing the number of vehicles exempted; (2) increasing the number of years for which such exemptions can be granted; and (3) changing the conditions for qualification for the exemptions.

The manufacturers know best what changes to the exemption would make it more attractive to them in the future. Therefore, the agency has decided to draft and publish a *Federal Register* notice soliciting comments and suggestions from our interested constituents. We expect to publish the notice within the next 30 days. Using the input we receive in response to the notice, the agency will craft a legislative proposal to alter the limitations of our current authority to grant exemptions. We believe the thoroughness of our efforts will produce a better legislative proposal that will result in a more effective mechanism for encouraging safety innovations and will have more chance of passage by the Congress.

### NEGOTIATED RULEMAKING PROCESS

Mr. CARR. NHTSA is considering the use of a negotiated rulemaking process in one or more rulemakings. Would you comment on how this process might work, which rulemakings might be included, and what response you have received from the automobile and safety community about proceeding in this manner?

[The information follows:]

The process of negotiation precedes the normal rulemaking path and adds to it a series of public meetings where a selected group of parties discuss probable solutions for resolving the issues of the rulemaking. The result of the public meetings is an agreement among the parties on the substance of a notice of proposed rulemaking (NPRM). The agreement also signifies that the parties involved will comment favorably on the NPRM. The agency then develops and publishes the NPRM. Should issues be aired by other commenters to the notice, the negotiating parties may meet again to resolve the new information or issues. The agency then proceeds with the rulemaking to achieve a final rule.

In response to a notice of request for comment on using the negotiated rulemaking process for agency rules the American Automobile Manufacturers Association was in favor of this process and recommended that a rulemaking on headlamp aimability be considered. Toyota also favored negotiation and recommended glazing light transmittance, rollover and electric vehicle brake systems as candidate rulemakings. Advocates for Highway and Auto Safety strongly opposed the use of negotiated rulemaking on issues that directly affect vehicle and highway safety regulations, including Federal motor vehicle safety standards. It believed that safety is a fundamental value that is inappropriate to negotiate.

The only negotiated rulemaking being considered would address headlamp aimability requirements. A rulemaking on glazing transmission requirements had been considered for negotiated rulemaking in late 1992, but the agency determined that there was no likelihood that it would be able to compromise on issues related to safety, and thus consideration of negotiating was dropped.

## STRATEGIC PLAN—NHTSA/FHWA COORDINATION

Mr. CARR. Has your strategic planning process included reviewing NHTSA's relationship with other modal administrations within DOT, specifically FHWA? Some of your critics believe that there is not enough coordination between NHTSA and FHWA, with regard to the management of the highway safety grant programs (Section 402), overlapping public outreach and information campaigns, and coordination of accident and driver safety data bases. Would you comment on how NHTSA is addressing these issues and concerns?

[The information follows:]

Yes. In July 1992, the agency issued a *Federal Register* notice inviting comments on a number of issues critical to the agency's strategic planning initiative. The notice included questions pertaining to NHTSA's institutional relationships. A summary of the comments received indicates that some of our constituents believe that there is a need for closer coordination between NHTSA and FHWA. We are also doing an internal review examining our relationship with FHWA and the many other public and private sector organizations that the agency does business with. The information gleaned from these two efforts is being considered by NHTSA senior management as part of their strategic planning deliberations. The agency's strategic plan (to be released this summer) will provide the framework for improving how NHTSA does business, including how we coordinate with FHWA and other organizations.

While improvements in coordination between NHTSA and FHWA can, and will be made, the two agencies are successfully coordinating several joint activities. These include efforts relating to safety management systems, IVHS, railroad crossings, speed control, heavy truck safety, and crash data.

## COORDINATION BETWEEN NHTSA, REGIONS AND STATES

Mr. CARR. Concerns have also been raised by the States about NHTSA's management of traffic safety programs in headquarters and the coordination of these activities with regional operations. In theory, the Office of Traffic Safety Programs has responsibility for research and program development and the regional offices have responsibility for program implementation. In practice, however, there appear to be areas of overlap and duplication and unclear lines of decision-making and communication between NHTSA headquarters, the regional offices and the states. Would you comment on these concerns and what you plan to do to address them?

[The information follows:]

The creation of the office of regional operations was only one of several organizational changes that occurred in mid-1991 which resulted in shifts of responsibility within the agency. The behavioral research office was moved from research and development to traffic safety programs. Traffic safety programs also has responsibility for program development, demonstration and evaluation. Program implementation was transferred to the regional operations office.

Over this two-year period, we have moved from shared responsibilities between headquarters and field offices to more clearly delineated functions. There has been increased communication among the offices to make sure that critical areas are not overlooked and that our customers are well served. As with any organization in a period of change, some responsibilities may at times appear blurred. However, most of the growing pains have disappeared, and our interactions between offices and with the states are on solid footing.

## PRIORITY PLAN UPDATE

Mr. CARR. Last year in our Committee report, the Committee applauded NHTSA's 1992–1994 priority plan, "Moving America Safely" and encouraged you to issue an updated plan which establishes short-term objectives and milestones for the agency. What are your plans for updating this document?

[The information follows:]

NHTSA appreciates your kudos on the priority plan. The agency has found it to be a very useful way of organizing our thinking about what NHTSA should be doing, communicating it to our customers and the public, and managing the activities of the agency to ensure that we focus our resources on our most critical goals and objectives.

NHTSA is currently in the process of developing the agency's first strategic plan, and we expect to have a draft of that plan this summer. Following that, the agency will develop business implementation plans in each of our major program areas. A summary of those business plans will provide a document similar to the Priority Plan spelling out the agency's activities, objectives, and milestones over the next several years.

## MOTOR CARRIER SAFETY PLAN

Mr. CARR. The fiscal year 1995 budget estimate includes an $18 million, or 28 percent increase, in funding for the Motor Carrier Safety Program which, as you know, is focused on improving highway safety by reducing accidents involving commercial trucks. In contrast, the 1995 budget estimate for NHTSA, which is responsible for all highway safety activities, is $277.2 million, a $21 million decrease below the 1994 level. Since the fiscal year 1995 budget is a zero sum budget, it appears that NHTSA resources were essentially transferred to the FHWA Motor Carrier Program. Given that only about 10 percent of all highway fatalities are caused by heavy trucks, I am wondering if the administration's budget priorities are too heavily weighted on the motor carrier side. Would you comment?

[The information follows:]

The Department is committed to reducing the annual toll of highway deaths, injuries, and related costs. The Secretary has announced two major safety goals for NHTSA to achieve by 1997: (1) reduce alcohol-related fatalities to 43 percent of the total compared to 45.8 percent in 1992, and (2) to increase safety belt usage rates to 75 percent from 62 percent in 1992.

While it is true that NHTSA's 1995 request for State grant programs is $22.5 million less than the FY 1994 enacted level, the reduction reflects the conclusion of two grant programs at the end of FY 1994, the Section 153 Safety Belt and Motorcycle Helmet Use Program and the Section 408 Alcohol Safety Program.

In FY 1995, the Section 153 program, as authorized, moves to a penalty phase for noncompliance in place of the current grant award incentive phase. States will be required to transfer funds from non-safety highway projects to highway safety activities if they fail to enact and enforce belt and helmet use laws.

As part of the drunk driving prevention effort, the older Section 408 grant program is being replaced by the new Section 410 Alcohol incentive grants. Section 410 provides grants to states which meet criteria to combat alcohol and impaired driving, including roadside checkpoints, and lower blood alcohol content (BAC) laws. The

FY 1995 Budget proposes to fund the Section 410 program at its fully authorized level of $25 million.

Also, its important to note that on February 12, 1994 Congress passed the Emergency Supplemental Appropriations Act (P.L. 103–211) which rescinded the unobligated balances of contract authority for both Section 153 and Section 408 programs.

The increase in the FHWA Motor Carrier Safety Grant Program request was motivated, in part, by implementation of the North American Free Trade Agreement. The funds will provide increases for safety compliance activities by the States. The Border States will be better able to deal with commercial truck traffic.

## SECRETARY'S ALCOHOL SAFETY BELT GOALS

Mr. CARR. Last year, Secretary Peña announced a new safety initiative to increase the percentage of Americans who wear their seat belts from the current rate of 66 percent to 75 percent (and to reduce alcohol-related traffic fatalities from 46 percent to 43 percent of all highway fatalities). While I believe that these are laudable goals, I wonder whether we are aiming too low and setting goals that might be achieved even in the absence of a new emphasis. In other words, is NHTSA setting itself up to succeed?

[The information follows:]

The alcohol impaired driving and seat belt usage goals were viewed as ambitious and yet achievable when they were established.

When the alcohol goal of 43 percent was set, alcohol-related traffic fatalities were already at an historic low of almost 46 percent. Further progress required additional effort. Police resources for impaired driving enforcement were diminishing, as crime, violence, and drugs placed increased demands on a shrinking enforcement workforce. Public education and prevention activities were competing for attention and resources with an expanding number of worthy causes. NHTSA believed that without a new emphasis, from the highest levels, the alcohol-related fatality proportion would not decrease further, and might in fact rise. We believe the 43% goal could be achieved, but not by "business as usual".

With regard to safety belts, and enactment of mandatory safety belt usage laws in 37 states and the District of Columbia from 1984 to 1990, resulted in an increase in usage from abut 15 percent to nearly 50 percent. However, progress in the last three years of this period averaged only 2–3 percentage points per year, since fewer states were left to enact such legislation. A major enforcement and public information program in 1991–92 boosted national usage to 62 percent, but progress again slowed toward the end of that emphasis period as other safety priorities (and crime concerns) competed for state resources.

Eighteen states have now reached or exceeded 70 percent usage and five have reached 75 percent or greater usage. In order to reach 75 percent national usage, many more will have to reach this milestone. This will require a major effort on the part of state and local communities, including public information, enhanced enforcement, and legislative upgrades. It is not a "business as usual" situation.

NHTSA is working with state and regional personnel to develop a new program which will combine impaired driving and occupant protection efforts to maximize their potential and their efficiency. This program will promote quarterly action programs and periodic, highly visible enforcement efforts. To the extent that a large number of states participate in the program, the goals set in 1993 should be attainable.

## BELT USE IN FOREIGN COUNTRIES

Mr. CARR. Several countries, like Canada, Australia and Great Britain, are now achieving seat belt use rates in the 80 percent range. I wonder why can't we accomplish the same?

[The information follows:]

We can achieve high usage rates such as those found in the countries which you mention. The first requirement for such rates is the presence of a mandatory usage law. Most of the countries you mention enacted such laws 8–10 years before the first state law became effective in the U.S. in 1984.

Clearly, there appear to be societal differences in some of these nations. In Great Britain and Australia, for example, usage rates climbed to very high levels almost immediately after mandatory use laws were enacted and remained at those levels without any special enforcement efforts. Why this happened is unclear but it is a very different experience from that of North American nations.

The experience in the U.S. is perhaps most similar to that of Canada. Both are large nations, consisting of relatively independent states (or provinces), many of which are larger than the European nations.

In Canada and the U.S., early efforts focused on increasing "voluntary" safety belt usage through public information and education programs. These programs had little impact and were followed by laws requiring safety belt use in the individual states and provinces. These state and provincial laws generally resulted in usage rates of 50–60 percent, but without enforcement, rates stabilized at these levels or lower.

Canada took the lead in implementing periodic, highly publicized enforcement efforts in the early-to-mid 1980's. These programs have increased the national usage rate by 30–35 percentage points over the past decade, to its current level of 86 percent.

In the U.S., enforcement efforts began in earnest in 1991 and it can be expected that it will take a similar period of time (i.e. 8–10 years) to reach a national usage rate of 85 percent or greater. In order to achieve this higher rate, several things must happen. First, periodic, highly publicized enforcement programs, such as those used in Canada, will have to be implemented by more states. Second, states' usage laws will have to be upgraded to permit primary police enforcement. Third, more substantial fines, including demerit points, may be needed, as in Canada.

The time is right to move ahead with a more aggressive effort in the U.S., and that is why NHTSA is launching a new campaign to urge the states to place greater emphasis on periodic, highly publicized police enforcement of usage laws and passage of primary enforcement laws.

## BELT USE SUCCESSES IN STATES

Mr. CARR. Some states like California and North Carolina have recently achieved use rates exceeding 75 percent. Could you comment on some of the strategies used successfully in those states and whether these strategies can be applied in other states?

[The information follows:]

California and North Carolina have had long term, aggressive programs to increase safety belt usage. Their success has resulted from a of primary enforcement law, coupled with vigorous, highly visible enforcement efforts.

North Carolina was one of the first states to enact a safety belt law which allows for primary enforcement. The State enforced its law aggressively over the years, resulting in a relatively high usage rate of 60–65 percent by 1990.

In 1993, following NHTSA's two-year effort to encourage more aggressive safety belt law enforcement by the states, North Carolina undertook a project to demonstrate that periodic, highly publicized enforcement, like the Special Traffic Enforcement Programs (STEPs) used in Canada, would result in significant increases in statewide usage. In these STEPs, enforcement was carefully coordinated with public advertising and media events to make the effort more visible to the public, thus increasing the perceived risk of being cited for a violation.

The North Carolina program, which was supported by Sections 402, 403 and 153 plus private sector funding, resulted in a rapid 15 percentage point increase in statewide usage. The most recent survey in the state showed 80 percent usage for passenger car drivers.

California until recently had a secondary enforcement law which was enforced vigorously as part of other traffic law enforcement efforts. Coupled with public information programs, this effort resulted in a relatively high statewide usage rate of 70 percent by the end of 1992.

In 1993 California put into effect an upgraded primary enforcement law, accompanied by large press coverage. This change in law resulted in a 13 percentage point increase in the statewide usage rate by the end of 1993. The safety belt usage rate as of March 1994 was 83 percent of drivers and front seat passengers.

As in North Carolina, the combination of a primary enforcement law and vigorous, highly publicized enforcement was key to achieving a high usage rate. While North Carolina's most recent increase resulted from highly publicized STEP enforcement of an existing primary enforcement law, California's most recent increase resulted from a highly publicized change in its primary enforcement law, amid an ongoing aggressive enforcement effort.

Primary enforcement laws and periodic, highly visible enforcement efforts are key to NHTSA's new initiative to increase the national safety belt usage rate.

### STRATEGY TO ACHIEVE ALCOHOL/BELT GOALS

Mr. CARR. Fiscal year 1995 funding for NHTSA operations is projected to increase by only 1 percent over 1994 levels, while fiscal year 1995 funding for state highway safety grants would decrease by 13 percent largely because the three-year authorization for the Section 153 safety belt program expires at the end of fiscal year 1994. Given NHTSA's declining budget overall, how will you accommodate your increased emphasis on seat belt and alcohol initiatives, and what will you do differently over the next two years to achieve your new safety belt/alcohol goals?

[The information follows:]

NHTSA's primary strategy is to encourage states to apply their existing resources in a more cost-effective manner. NHTSA's national campaign to reduce alcohol-related fatalities and increase the national safety belt use rate emphasizes combining program efforts whenever possible.

For example, when conducting enhanced traffic law enforcement efforts such as sobriety checkpoints, enforcement agencies are being urged to make sure that safety belt violations are included as part of the overall enforcement activity. Similarly, states are being encouraged to follow the example of some existing statewide media campaigns that include multiple safety messages, such as "Buckle Up Sober."

In addition to combining program activities, states are being urged to plan for periodic (e.g. quarterly) emphasis programs. These programs, which run for a limited period of time, but which are repeated over the course of the year, generally receive much media and public visibility.

Finally, states are being urged to conduct the most effective combinations of enforcement and public information campaigns possible. Wherever possible, they will be urged to conduct the Canadian-type Special Traffic Enforcement Programs (STEPs) as part of their quarterly action programs.

This combination of combined programs, quarterly action periods, and periodic, highly visible enforcement (including selective traffic enforcement projects) can be expected to result in an effective and efficient action program.

### SECTION 153 INCENTIVE GRANT PROGRAM

Mr. CARR. Fiscal year 1994 was the last year of the three-year authorization for the Section 153 program which was intended to encourage States to enact mandatory safety belt and motorcycle helmet use laws. Was the grant program a success? To what extent did States strengthen their safety belt laws, including establishing meaningful fines for violations, providing primary enforcement authority, and covering occupants of back seats, pickup trucks and vans?

[The information follows:]

The agency believes that section 153 incentive program has been successful. To date, eight States have enacted safety belt or motorcycle helmet laws since the inception of the incentive program: There are now safety belt laws in Nebraska, North Dakota, West Virginia, Vermont, Massachusetts, South Dakota and Kentucky. There is now a universal motorcycle helmet law in Maryland.

Two States, Ohio and Connecticut amended their existing safety belt use laws to remove unacceptable air bag exemptions.

Over the three years of the Section 153 incentive program, nineteen States (in addition to Maryland) introduced legislation to enact a universal motorcycle helmet law.

The statute and its implementing regulation are limited to the coverage of safety belt use in the front seat of passenger motor vehicles. Neither the incentive program nor the penalty provisions direct the States to adopt or modify their safety belt laws in the areas of severity of fines, primary police enforcement, use by back seat occupants, and usage in vehicles such as pickup trucks and vans.

## STATES WITHOUT BELT LAWS

Mr. CARR. What states still do not have a mandatory safety belt use law?

[The information follows:]

Maine and New Hampshire are the only two states that have never enacted a mandatory safety belt law. North Dakota enacted a belt law, but suspended its effective date pending the outcome of a June 1994 State vote.

## SECTION 153—STATES SUBJECT TO FEDERAL AID TRANSFER

Mr. CARR. ISTEA provides that states which did not enact both a mandatory seat belt and a motorcycle helmet law by October 1, 1993, will be subject to the transfer of a portion of their fiscal year 1995 Federal-aid highway allocations to highway safety programs. How many states are subject to the transfer of their fiscal year 1995 federal aid highway allocations?

[The information follows:]

Twenty-eight (28) states will have one and one half (1½) percent of their fiscal year 1995 appropriated funds under the National Highway System, Surface Transportation, and the Congestion Management and Air Quality Programs transferred to their apportionments for the highway safety program authorized by 23 U.S.C. § 402. A proportional amount of obligation limitation will accompany this transfer.

Mr. CARR. How will NHTSA and/or FHWA enforce these provisions?

[The information follows:]

NHTSA and FHWA will jointly carry out the administrative responsibilities of the penalty provisions. While NHTSA has the lead in terms of determining non-complying States, FHWA will transfer the funds from the highway programs to the States' highway safety programs. Both agencies will provide administrative oversight to assure that the funds are used as Congress had intended and that appropriate Section 402 regulations and guidelines are followed.

## SECTION 153—PROPOSED DELAY TO FEDERAL AID TRANSFER PROVISION

Mr. CARR. Last year, the House passed legislation to give states one more year (until October 1, 1994) to pass mandatory seat belt and motorcycle laws before sanctions kick in. Similar legislation has been introduced in the Senate. Does NHTSA support granting states additional time to pass safety belt and motorcycle helmet laws?

[The information follows:]

The agency supports the retention of the Section 153 transfer of certain federal aid funds to encourage passage of safety belt and motorcycle helmet use laws, and also supports retention of the October 1, 1994, date for initiating the transfers.

NHTSA supports the House-passed ISTEA Technical Corrections bill (H.R. 3276) which, if enacted, would amend Section 153 to give the states until September 30, 1994, to put both belt and helmet use laws into effect before imposing the 1½ percent penalty transfer on October 1, 1994. Three states (Vermont, Massachusetts and Kentucky) now have both laws; but since they did not have these laws in effect on October 1, 1993, they are subject to the transfer in fiscal year 1995. The Technical Corrections bill, if enacted, would amend this process.

## SECTION 153—STATE COMPLIANCE

Mr. CARR. A number of state legislatures are currently in session or have concluded their 1994 sessions. Did any additional states pass the required safety belt and motorcycle helmet use laws, or appear likely to pass such laws, during 1994?

[The information follows:]

As of late March 1994, three states (Kentucky, Massachusetts, and South Dakota) had enacted safety belt use laws. In the two states which do not have such laws (Maine and New Hampshire), no belt use laws have been introduced in the 1994 session. Motorcycle helmet use legislation has been introduced in nine states. The legislation has died in two of these states, and the prognosis is not good in the others.

## AUTOMATIC SAFETY BELT PROBLEMS

Mr. CARR. In past years, we have talked about the terrible injuries that have occurred in automobiles equipped with automatic safety belts and manual lap belts, when the passenger does not fasten the manual lap belt. Are you seeing any more evidence of problems with these particular restraint systems?

[The information follows:]

Automatic occupant protection, state belt laws, and greater voluntary belt use amount to a 'winning combination' that saves lives and reduces injury severity. The agency has always encouraged consumers to utilize all safety belts installed in their vehicle. Although the automatic belt functions to provide protection without any action on the part of the occupant, the occupant must take an active part in buckling the manual lap belt to achieve the maximum protection. Should buckling the lap belt be overlooked or ignored when first starting the automobile, the belt system will not deliver its full life saving potential.

The agency's Consumer Information Bulletins (published annually from 1987) stress that:

No matter what kind of automatic system your car has, if it has a manual lap belt, you must buckle it for maximum protection. Use the complete system the manufacturer installed in your car and follow the manufacturer's instructions listed in your car owner's manual.

Other agency publications (such as "Sudden Impact," a consumer booklet that describes crash protection) also stress the importance of buckling up.

The agency collects accident data through a number of formalized data gathering systems, including the National Accident Sampling System (NASS), the Fatal Accident Report System (FARS), and other special case investigation systems. Reports are submitted to Congress periodically on the findings of these systems, especially in the evaluation of the effectiveness of occupant protection. In is difficult to assess whether certain reported specific cases represent a "trend" toward increasing frequency. However, from the more unified perspective of global crash statistics, using all of the data represented in the agency's NASS and FARS data bases, automatic safety belts with manual lap belts, provide a great potential for reducing moderate and greater injuries.

## LABELS ON SAFETY BELTS

Mr. CARR. How many cars currently on the road are equipped with automatic shoulder belts and manual lap belts, or automatic shoulder belts and no lap belts? Should warning labels be required on cars equipped with these belt combinations? Should we require that these cars be retrofitted before being sold or resold?

[The information follows:]

The agency estimates there are 13.5 million passenger cars with automatic 2-point belts on the road as of September 1, 1993. The agency estimated the effectiveness of these systems, as well as the 3-point automatic belt and air bags in the "Evaluation of the Effectiveness of Occupant Protection, Federal Motor Vehicle Safety Standard 208", Interim Report, June 1992. The best estimate of effectiveness, relative to manual belts at 1983 use rates, in fatality reduction was 16 percent for motorized 2-point belts without disconnect, 7 percent for motorized 2-point belts with disconnect, 8 percent for nonmotorized 2-point belts, and 10 percent for nonmotorized 3 point belts with disconnect. Thus, 2-point automatic belts had about the same fatality effectiveness as 3-point automatic belts.

The agency does not believe it should require warning labels on cars equipped with these belt combinations. Automatic belts are a regulatory success story, saving thousands of lives and injuries, as the above mentioned numbers show. Also, these belts are being phased-out of production and air bags with manual lap/shoulder belts will soon be standard in all passenger cars and light trucks, even before the dates required by Congress. By the time the agency issued a final rule, assuming it were inclined to do so, and provided a reasonable period of leadtime, a warning label would be of no value because no new vehicles would have automatic belts.

The agency has required for many years warning lights and buzzers for manual lap/shoulder belts and automatic belts. In addition, many of these passenger cars have warning systems, warning lights and/or buzzers, to remind occupants to fasten their manual lap belts. These were voluntarily installed by the automobile manufacturers. While there were a few models that did not include manual lap belts, every manufacturer began voluntarily installing manual lap belts for 2-point automatic belt systems a few years ago.

The agency also does not believe it should require these cars to be retrofitted as they comply with our safety standards and they do not contain a safety defect. These belt systems have been shown to have safety benefits comparable to other automatic belt systems. In addition, the agency does not have the authority to require retrofitting of warning labels or manual lap belts on used vehicles.

## LABELS ON REAR FACING CHILD SEATS

Mr. CARR. NHTSA recently announced final regulations requiring that new rear facing child safety seats be labeled by the manufacturers with a visible warning label that the safety seats should not be used in the front seat of automobiles equipped with a passenger side air bag. NHTSA first issued a consumer advisory on this subject as early as December 1991. Why has it taken the agency so long to complete the rulemaking?

[The information follows:]

In December 1991, based on the preliminary findings of the agency's research on child safety, the agency issued a consumer advisory warning owners of rear-facing infant safety seats not to use them in the front seats of vehicles equipped with a passenger-side air bag. Upon completion of the testing and evaluation program, in Spring 1992, the agency initiated a rulemaking activity to require manufacturers of child restraint systems to label rear-facing child seats with a warning against using them in seating positions in proximity to front seat air bags. On April 16, 1993, a notice of proposed rulemaking was published in the Federal Register seeking comment from the public on the proposed requirements. Sixteen comments were received by June 15, 1993, the date of the end of the comment period. The received comments were analyzed and evaluated leading to the final rule that was published on February 16, 1994.

## CHILD SEATS WITH AIR BAGS

Mr. CARR. News reports on whether parents should use child safety seats at all in the front seat of a vehicle equipped with a passenger side air bag have been somewhat confusing. In 1991, NHTSA advised consumers that "The safest position for any type of child seat is in the rear seat, even if a car is not equipped with a passenger side air bag." In 1994, NHTSA advised that "air bags do not pose a threat to toddlers using forward facing safety seats, including convertible seats that work both ways." Would you clarify what the agency's advice is concerning where child safety seats should be used?

[The information follows:]

The agency still maintains that the safest position to place any child seat is in the rear seat of a vehicle regardless of whether the vehicle is equipped with an air bag. Federal Motor Vehicle Safety Standard 213, Child Restraint Systems, requires manufacturers of child restraint systems to include, in the printed instructions accompanying the child restraints, the statement that: "In a vehicle with rear designated seating positions, the instructions shall alert vehicle owners that, according to accident statistics, children are safer when properly restrained in the rear seating positions than in the front seating positions."

The agency has also stated publicly that research has indicated that the air bag does not pose an additional threat to children restrained in forward-facing seats. This information does not change the agency's long standing position that the safest position for children is in rear-seat child restraints. The focus of the March 1994 notice in the Federal Register was on air bag interaction with child restraint systems. The objective of the agency was to highlight the negative interaction between air bags and rear-facing infant seats.

## USAGE RATES ON CHILD SEATS

Mr. CARR. Past NHTSA surveys have shown child safety seat use rates to be about 80 percent; however, about one-fourth of the children riding in child seats or wearing belts are improperly restrained. What are the most recent statistics regarding child safety seat use and misuse?

[The information follows:]

The 80 percent usage rate figure came from the 19-City Survey conducted by the agency. This national index of child seat usage was derived from observational surveys conducted in the parking lots of shopping centers in major cities across the nation. The rate derived from this procedure was quite reliable and useful as an index of change. However, use of the results of this survey as a national estimate of child seat usage received criticism from child passenger safety advocates in the states. They claimed that usage rates in their state surveys, conducted in a variety of locations, often including intersections, were much lower. Their surveys also showed misuse to be a problem.

Since the state surveys are not probability samples, it is not possible to derive a composite national estimate using an aggregate of such surveys (as was done in the safety belt area).

A relatively unbiased estimate of child restraint usage can be obtained by calculating the use of child safety seats and seat belts in potentially fatal crashes. This estimate is derived by adjusting the known percentage of restraint use by children in fatal crashes by the estimated number of children saved from death due to restraint use. This estimate of use increased from 48 percent in 1988 to 59.8 percent in 1992, a 25 percent increase. This is the estimate currently being used by the agency to monitor child restraint use.

NHTSA has awarded a new contract to study child safety seat misuse. This contract will study use and misuse information for the purpose of developing and testing an effective instrument to measure child safety seat misuse in the future.

## CHILD SEAT MISUSE RISK

Mr. CARR. Which "misuse modes" are potentially most dangerous to children restrained in child safety seats?

[The information follows:]

Three misuse modes common to child seats are: 1) improper installation of the child seat initially, 2) improper fastening of the restraint within the child safety seat, and 3) unbuckling of either the vehicle's occupant belt system which attaches the child safety seat or the restraint within the child safety seat by the child during travel. The child safety seat standard (FMVSS No. 213) requires a minimum release force of 9 pounds while the vehicle's occupant belt buckle has no minimum requirement.

Another possible misuse problem is the child slipping out of the belts, most commonly with seats which use clips to keep the belts together. From the agency's "19 City Study," in 1990 the most prevalent misuse problem was improper installation of the child safety seat.

These misuse modes may cause the child to impact interior surfaces or, worse, be ejected from the vehicle during a collision and, thus, are all potentially dangerous situations.

## BELT USE FOR CHILDREN AGES 5–12

Mr. CARR. Previous data has also indicated that the safety belt use rate for children ages 5 to 12 who have outgrown toddler seats is poor. What variables lead parents not to use safety belts for this age group and what are the current use statistics?

[The information follows:]

The most recent statistics, based on direct observations of restraint use by young children, are those from the 19-City Survey in 1990. These data show a use rate of 49.1 percent for the 5–12 age group, compared with a use rate of 80 percent for children age 4 and under and 49 percent for all passengers over the age of 4. Thus, while the 5–12 age group has a usage rate similar to that of adults, it is much lower than the rate for younger children.

A number of factors may contribute to this lower rate, which occurs at about the same time children outgrow child safety seats. Parents may have difficulty in getting older children to respond to their demands for safe behavior. Developmentally, children at this age test the limits of new-found freedoms, making constant reminders to buckle up a necessity. Parents may relax their vigilance as they see their child assuming greater responsibility for their own behavior.

Further, if parents do not use safety belts themselves, children are likely to follow suit. Children in this age group are also more likely to be transported to school or to extra-curricular activities by someone other than a parent. These persons may not feel as comfortable as parents would in demanding safety behavior.

Finally, due to the wide variance in height and weight of children in this age range (especially at the younger ages), parents may find it more difficult to adjust lap and shoulder belts to fit appropriately.

## CHILD RESTRAINT USAGE GOALS

Mr. CARR. What specific goals has NHTSA set to increase the proper use of child restraints and to enhance child passenger safety?

[The information follows:]

NHTSA is considering a national occupant restraint survey to measure safety belt use, automatic protection use and child safety seat use. If that survey is conducted, the agency will be in a far better position to set a national use goal.

NHTSA has a number of goals for program efforts to increase child safety seat use. NHTSA intends to conduct major outreach efforts with national organizations including child passenger safety awareness training for pediatricians and other health care professionals; training of law enforcement officers to increase child passenger safety law enforcement efforts; training of fire and rescue personnel to become child restraint technical experts; and increasing public information and education efforts to support enforcement activity. Efforts will also be conducted with appropriate national organizations to reach high-risk, low-use populations.

## CHILD SEATS—REASONS FOR DEFECT RECALLS

Mr. CARR. Between 1989 and 1993, NHTSA initiated 53 recalls involving nearly 20 million child safety seats. What are the most significant reasons for defective seats, and which manufacturers seem to be most responsible for recalled seats?

[The information follows:]

The most significant safety defects appear to involve the integrity or operation of the harness of the restraining device, in particular the buckle assembly.

Child safety seat problems do not appear to be particular to any manufacturer. Those manufacturers who produce more seats sustain more safety recalls than the less voluminous manufacturers.

## INCREASING RECALLED CHILD SEAT RESPONSES

Mr. CARR. On average, only 27 percent of child safety seats that are recalled are repaired or replaced. Please discuss NHTSA's efforts to improve the response rate to recalls of defective safety seat models and describe any additional initiatives that NHTSA will undertake during fiscal year 1995 to improve child safety seat recall completion rates.

[The information follows:]

As discussed in NHTSA's recent report to Congress, "Efforts by the National Highway Traffic Safety Administration to Improve Child Safety Seat Recall Completion Rates," the most significant program to increase recall completion rates of future recalls is child safety seat registration. In addition to the registration of child safety seats manufactured on or after March 9, 1993, NHTSA has asked the child seat manufacturers to voluntarily maintain owner records on child seats manufactured prior to March 1993. The manufacturers have agreed to maintain and use this information in future recalls, and NHTSA is facilitating the collection of owner names and addresses for these seats. The collected registration data will be provided to the respective manufacturers.

NHTSA plans to survey child seat owners to ascertain why they responded or failed to respond to safety recalls. NHTSA also will improve child seat recall notification by working closer with retails, consumer groups, doctors' offices and hospitals, and specialized media. NHTSA will develop a child safety seat brochure that describes the proper use of the seats, and describes how a consumer can report a safety defect to NHTSA and inquire about safety recalls.

## IMPACT OF MANUFACTURER RECORDS ON CHILD SEATS

Mr. CARR. What has been the impact of the new requirement that manufacturers maintain child safety seat owner information submitted by seat purchasers for child safety seats manufactured on or after March 9, 1993?

[The information follows:]

Since there has not been a child safety seat recall that involves seats manufactured after March 9, 1993, it is not possible to measure the impact of child safety seat registration. Nonetheless, the registration program appears to be generating interest among owners of new child safety seats. Based on an informal survey of child safety seat manufacturers, an average of 20 percent of purchasers of seats manufactured with registration cards have returned the registration cards (ranging from a high of 40 percent to a low of 7 percent per manufacturer).

## AIR BAG EFFECTIVENESS

Mr. CARR. About 90 percent of all new cars now come equipped with driver side air bags and by model year 1998, all new cars are required to have both driver and passenger side air bags. What is the current picture regarding both the effectiveness of air bags and the types of injuries that they cause? What new developments have occurred to improve their effectiveness and safety?

[The information follows:]

Air bags, in combination with increased belt use significantly reduce the driver's risk of fatality and serious injury in a crash. The fatality risk of drivers in cars equipped with air bags plus manual belts (at 1991 use rates) is 23 percent lower than in "baseline" cars equipped only with manual belts (at 1983 use rates).

An air bag deployment is a rapid, forceful event. This is necessary to counteract the violent forces to which humans are subjected in a serious crash. Sometimes the air bag itself may cause an injury, but typically these are minor in comparison to the injuries that would occur if vehicles were not equipped with air bags.

Air bags are designed to prevent serious internal and skeletal injuries but have occasionally produced cases of minor skin abrasion injuries.

Some early air bag designs had vents for dispersion of gases generated during inflation, which caused a few, relatively minor hand burns. Newer designs have relocated the vents in order to reduce the change of these injuries.

## AIR BAG IMPROVEMENTS

Mr. CARR. What improvements in air bag design are the car companies making to make them more sensitive to crash severity, belt use and the proximity of occupants to the air bag before deployment?

[The information follows:]

Air bag inflation rates, air bag folding designs for storage in air bag modules, and the air bag decorative protecting cover designs are being improved to reduce injuries to occupants during deployments.

Sensors and instruments within the passenger compartment to establish occupant status (size, position relative to air bag) are being developed to allow tailored, automatically adjusted air bag inflations best suited for the crash circumstances.

Both multiple, sequential ignitions of solid propellant inflators and hybrid air bag inflators, employing high pressure stored gases with supplementary pyrotechnics, could be used for tailoring aggressiveness of air bag inflation in response to occupant status information.

## IIHS DATA ON AIR BAG EFFECTIVENESS

Mr. CARR. The Insurance Institute for Highway Safety has found that air bags are more effective in large cars compared with midsize and smaller cars. Are these findings consistent with those of NHTSA?

[The information follows:]

NHTSA has not analyzed the effectiveness of air bags separately for large, midsize, and small cars. The agency does not dispute the results in the IIHS study, which used essentially the same analysis method as NHTSA's Interim Report on the effectiveness of occupant protection (June 1992).

However, NHTSA is not sure that the effectiveness differences found in the IIHS report are statistically significant. Even if they were significant, it is not clear that the differences would be attributable to car size. The large cars equipped with air bags are quite different make-models than the small cars, with older drivers and a different distribution of crashes (fewer rollovers). The agency intends to explore this issue in its future analyses of air bag effectiveness.

## NISSAN MAXIMA AIR BAGS

Mr. CARR. NHTSA has under way an investigation into the inadvertent deployment of air bags in 1992 and 1993 model year Nissan Maximas. What can you tell us about your investigation and what you have learned?

[The information follows:]

This defect investigation was opened on July 12, 1993, based on complaints of inadvertent deployment of the driver-side air bag in 1992 and 1993 Nissan Maximas. The incidents of inadvertent deployment were due to relatively minor underbody impact in most of the complaint vehicles. During the investigation, it was learned that Nissan made a design change to the tunnel sensor in the subject air bag system in September 1992. The sensitivity of the sensor was decreased to reduce the possibility of air bag deployment caused by underbody impacts.

On January 10, 1994, Nissan notified NHTSA that it would recall approximately 65,000 Nissan Maximas (Recall Number 94V–007) to replace the old tunnel sensor with the revised, less sensitive tunnel sensor. The recall involves approximately 45,700 model year 1992 Maximas equipped with optional air bags and approximately 19,300 early production model year 1993 Maximas equipped with tunnel sensors produced before the design change in September 1992. Owners were notified of the recall during the early part of March 1994.

## SIDE AIR BAG BENEFITS

Mr. CARR. Volvo recently announced that it will offer side impact air bags on some of its 1995 model year cars. The Volvo side air bag apparently will be contained in the front seats. At least two automobile manufacturers (GM and Mercedes) are working on side impact air bags that would deploy from the door frame. Has NHTSA studied these new technologies? What can you tell us about their reliability and potential safety benefits?

[The information follows:]

The new technologies represented in side impact air bags are truly complex and varied. For example, side air bags could deploy from the roof to protect the head, or from the seat and/or door to protect the thorax and abdomen. NHTSA has kept abreast of the technology efforts through the literature, technical paper presentations, and technical discussions with the manufacturers and suppliers. Some of the earliest efforts on side impact air bag development were conducted about five years ago by Warner Associates in Utah, using government funding.

Since the available interval after onset of using a crash for timely air bag deployment is minimal, the details of post crash contact deployment sensor design are uniquely dependent on the car interior, side structure, seat structure, seat location, and door design of the subject vehicle. The automotive industry is pursuing designs to suit particular car lines, such as Volvo has already done. General Motors, Mercedes-Benz, and Toyota also have researched, demonstrated, and/or patented various side air bag concepts. Because a side impact air bag is necessarily close to the occupant and must deploy very quickly, potential deployment injury to occupants, particularly infants and children, must be carefully considered in the designs. Most technical experts agree that the ideal air bag deployment activator would supply precrash warning to allow a more gentle air bag deployment. NHTSA is actively researching anticipatory crash sensing systems development.

While they are complex in design, the potential safety benefits of inflatable side air bags could be high. However, until real world experience is available, these benefits and any associated sensing or deployment risks cannot be quantified.

## REAR AIR BAG BENEFITS

Mr. CARR. What about rear seat air bags? Nissan is now offering a rear seat air bag on certain luxury vehicles. Have you studied the safety impact of this technology?

[The information follows:]

In NHTSA programs of the early 1970's, rear seat air bags were developed and tested. The simultaneous inflation of air bags for protection of front and rear seat occupants would pose new considerations in design. Because of the large total volume of deploying air bags in the front and rear, considerations of passenger compartment overpressure must be addressed to assure that occupant hearing impairment does not occur. The effluent from current air bag gas generator designs could also constitute a threat to a portion of our population suffering from asthma or other respiratory deficits, if front and rear air bags are implemented without additional compartment venting provisions. The threat to out-of-position occupants and infants in rearward facing child restraints could be similar to that currently present in the front passenger air bag installations. Rear seat occupants are normally well protected in frontal crashes by wearing their lap and shoulder belts and by padding the back of the front seats.

## DEMOGRAPHICS IMPACT ON ALCOHOL-RELATED FATALITIES

Mr. CARR. During the 1980s, declines in alcohol-related fatalities occurred not only in the United States, but also in other industrialized countries, including Great Britain, Germany, Canada, and Australia. Is it possible that the improvements we have witnessed in the incidence of alcohol-impaired driving in the United States are due as much to societal and global trends in alcohol consumption, shifting demographics and economic conditions as to any specific initiatives or efforts of NHTSA?

[The information follows:]

The recent reduction in alcohol-related fatalities in many industrialized countries was documented and studied in a session organized by the Transportation Research Board in The Hague, the Netherlands, on September 23, 1993. The session report noted that the patterns and reasons for the reduction varied from country to country. Some countries (including the United States) reported large reductions among young drivers, while others did not. Some countries reported reductions in pedestrian alcohol-related fatalities, while others did not. Some countries reported decreases in alcohol consumption, while others did not.

The reasons for these reductions also differed in various countries. Various countries adopted different measures to deal with their traffic alcohol problems, based on the specific nature of the problem in each country, resources available, and the respective country's societal and cultural framework within which its alcohol program had to operate. Countries used different legislative, enforcement, public education, and prevention strategies. The majority of countries reported changed public attitudes regarding drinking and driving, but this likely was influenced by each country's specific measures.

In short, while societal trends undoubtedly influenced alcohol-related fatalities, it is extremely unlikely that they were solely responsible for the observed international declines.

## SECRETARY'S BELT GOAL

Mr. CARR. Secretary Peña has announced a goal of reducing the proportion of highway accidents related to alcohol by 3 percent to 43 percent by 1997. How did you determine that a 43 percent target would be a reasonable goal? Should we be aiming for a lower target?

[The information follows:]

When the alcohol goal of 43 percent was set, alcohol-related traffic fatalities were already at the historic low of 46%. Further progress required additional effort. Police resources for impaired driving enforcement were diminishing, as crime, violence, and drugs placed increased demands on a shrinking enforcement workforce. Public education and prevention activities were competing for attention and resources with an expanding number of worthy causes. NHTSA believed that without a new emphasis, from the highest levels, the alcohol-related fatality proportion would not decrease further, and might in fact rise.

The 43% goal was NHTSA's best estimate of the improvement that might be achieved with a renewed emphasis on alcohol-impaired driving. NHTSA did not believe that it could be reached by "business as usual". NHTSA set the 43% goal to be challenging, but possible.

At the annual Lifesavers Symposium in Washington D.C. on March 10, 1994, Secretary Peña suggested that a lower goal might be within reach. An assessment of how much progress has been made will be possible after all states have had a chance to establish individual goals and after 1993 data are available.

## TARGET DRIVERS TO REDUCE ALCOHOL RELATED FATALITIES

Mr. CARR. Last year, the National Transportation Safety Board identified teenage drinking as a significant problem, particularly with regard to enforcement of underage drinking laws. More recently, the National Commission Against Drunk Driving has advocated that NHTSA should focus its efforts on young adults, ages 21 to 34, because they cause more than 50 percent of all alcohol-related traffic fatalities. Others have said that the focus should be on repeat offenders and drivers with high blood alcohol concentration levels. Where should NHTSA place the greatest emphasis in order to achieve the biggest gains?

[The information follows:]

All four areas deserve emphasis. Teenagers continue to be over-represented in alcohol-related crashes, despite substantial recent reductions. More important, reduction in youthful drinking and driving can carry lifetime benefits. Drivers ages 21 and 34 do contribute the largest percentage of all alcohol-related traffic fatalities and have received little specific attention. Repeat offenders and high BAC drivers are over-represented in alcohol-related fatality data. However, they are frequently problem drinkers, and it is difficult to affect their behavior without dealing first with their alcohol problem.

Mr. CARR. How does your budget request reflect that emphasis?
[The information follows:]

NHTSA's budget supports activities in all four target areas. It continues an active youth alcohol program, including provisional licensing demonstrations, worksite programs, and improved law enforcement, to continue the reductions achieved in recent years. If funds research and development activities specifically directed at high-risk drinker drivers in the 21–34 age range, to learn how their attitudes and behavior can be influenced through prevention and enforcement activities. It will demonstrate newly-validated screening instruments for detecting problem drinkers who should be referred to alcohol treatment. And it will complete a demonstration of sobriety checkpoints to detect and deter repeat offenders who drink and drive.

To address several of these priority area, NHTSA's budget will support the Secretary's combined alcohol-safety belt initiative by assisting states to pass key drinking and driving laws, supporting active law enforcement and sanctions, and conducting prevention and public information activities directed both at specific cultural groups and at the general driving population.

## UNDERAGE DRINKING ENFORCEMENT

Mr. CARR. What progress has been made since last year regarding tougher state enforcement of underage drinking laws?
[The information follows:]

Enforcing underage drinking laws continues to be a low priority with many police and alcohol control agencies. Although all states now have set 21 as the legal age for purchase and possession of alcoholic beverages and 13 states and the District of Columbia have enacted "zero tolerance" laws for drivers under age 21, there is little evidence to suggest that these laws are being enforced at a significantly higher level, nationally, than last year. Limited manpower and other resources and competition with other high visibility crime, such as youth violence, are partial reasons for this low enforcement rate.

There are success stories. Some jurisdictions throughout the nation have conducted sting operations and "cops in shops" programs to apprehend sellers and purchasers, respectively. Some police agencies have initiated special task groups that target keg parties and other drinking events popular with young people. Keg registration laws, which assist police in identifying retailers who are selling to youth, are gaining in popularity.

NHTSA has developed and delivered training for police management to address the problem of enforcing impaired driving and drinking by young people. NHTSA is developing a technical assistance capability to assist police agencies in enforcing underage drinking and impaired driving laws. In partnership with the Department of Justice, NHTSA is identifying sites to demonstrate effective coordination between police, prosecutors and judges to increase enforcement of these offenses. Finally, NHTSA will be testing the feasibility of using "Teen Courts" as a method to encourage enforcement, adjudication and follow-up of teenage drinking law offenders.

## ADMINISTRATIVE LICENSE SUSPENSION LAWS

Mr. CARR. The NTSB has placed on its "Most Wanted" list of safety improvements the enactment of state laws allowing administrative suspension of licenses when drivers fail or refuse an alcohol test. Do you agree that these laws should be the highest priority for state activity against drunk driving?
[The information follows:]

NHTSA agrees completely with the NTSB. Together with the NTSB, the agency formed a coalition of more than 40 public and private sector organizations to promote the passage of administrative license suspension or revocation laws. NHTSA has conducted educational workshops and provided expert testimony in support of these laws, and has developed and distributed fact sheets, research reports, and evaluations that support administrative license suspension laws. Through a cooperative agreement with the American Association of Motor Vehicle Administrators, NHTSA provides technical assistance to states that are implementing administrative license suspension laws.

## CALIFORNIA SAFETY BELT LAW

Mr. CARR. In California, traffic officials have indicated that the state's seat belt law has been the major contributor to reducing alcohol-related highway deaths. Is California unique in this regard, or is this result consistent with what is occurring in other states?

[The information follows:]

While belt use laws have helped reduce alcohol-related highway deaths throughout the United States, they are not the major contributor. Even in California, Deputy California Highway Patrol Commissioner D.O. Helmick confirms that the belt law is only one factor influencing alcohol-related fatalities. In 1991, California Attorney General Dan Lungren stated that "This 15 percent reduction in alcohol-involved fatalities [during a one-year period ending June 1991] is the sharpest annual decline over the past decade. We can attribute this in part to the adoption last year of the state's lower .08 blood alcohol limit and the new 'On-the-Spot' license suspension law."

Nationwide, alcohol-related traffic fatalities dropped 20 percent from 1990 to 1992, while traffic fatalities with no alcohol involved dropped only 4 percent. In 1993, alcohol-related traffic fatalities continued to decline while non-alcohol-related fatalities rose, according to preliminary estimates. If safety belt laws and increased belt use were the major factor in reducing alcohol-involved fatalities, then fatalities not related to alcohol should have dropped a similar amount.

## ALCOHOL REPEAT OFFENDER PROGRAMS

Mr. CARR. What portion of the annual 18,000 alcohol-related highway fatalities is caused by repeat offenders, and what successful strategies have been implemented to get repeat offenders off the roads?

[The information follows:]

In national FARS data, repeat offenders (those who have a recorded DWI conviction within the past 3 years) account for approximately 10–15% of drinking drivers in fatal crashes each year.

There is evidence that severe sanctions for repeat offenders (lengthy license revocation, substantial fines, jail, etc.), coupled with tough impaired driving legislation such as administrative license revocation and lower BAC limits, have reduced the number of repeat offenders. However, many repeat offenders continue to drink and drive. Several states have implemented actions against the vehicles of repeat offenders, such as special license plates, interlock systems, vehicle immobilization, impoundment and confiscation that may show promise. In addition, many repeat offenders are problem drinkers who require an alcohol problem assessment and appropriate treatment.

## PUBLIC EDUCATION AND LAW ENFORCEMENT IN REDUCING DRINKING DRIVERS

Mr. CARR. What is known about the efficacy of public education versus tough law enforcement in reducing drinking and driving and what relative emphasis will NHTSA be placing on public education efforts versus tougher law enforcement measures?

[The information follows:]

Public education and law enforcement are complementary, not competitive. Neither has demonstrated much success in isolation; both together have reduced drinking and driving substantially. NHTSA's research and programs support a comprehensive approach including both public education and law enforcement.

Many drinking and driving laws have demonstrated their effectiveness in evaluation studies (for example: administrative license revocation, zero tolerance laws for youth, minimum drinking age 21). Public education is crucial to this success in two ways. First, laws cannot be passed unless public attitudes, as expressed through state legislature, support these laws. Public education influences these attitudes. This was demonstrated in the early 1980s, when extensive public education efforts by MADD and others led to hundreds of stronger drinking and driving laws. Second, laws serve their purpose only when they are well-publicized, so that the driving public knows the potential consequences of drinking and driving and changes its behavior as a result. Again, evaluation studies show that extensive publicity for laws increases their effectiveness (zero tolerance laws and sobriety checkpoints are two examples).

Traffic safety public education seeks to change knowledge, attitudes, and behavior. Its effectiveness improves the more it is based on detailed knowledge of the target audience's knowledge, values, and attitudes. NHTSA is actively addressing targeted public education through basic research on the values of drinking drivers, marketing research on high-risk young male drinkers, and program development with ethnic and cultural groups.

## DRIVER EDUCATION ACTIVITIES

Mr. CARR. Would you brief us on what NHTSA has done in the area of driver education during the past year?

[The information follows:]

NHTSA is involved with two major activities that were initiated within the past year. In April 1993 the agency convened a two-day workshop to identify training requirements designed to reduce young driver risk taking and improve decision making skills. Eleven national and international experts in traffic safety education and decision making attended. The agency published a final report on the proceedings in February 1994. The results were used for the Congressional report (see below) and will be integrated into our on-going young driver risk taking research.

A second major activity was the preparation of a report to the Committee on the agency's research agenda for improving novice driver education. This report is currently being reviewed by NHTSA's senior management. Proposed activities would be initiated in fiscal year 1995.

In addition, NHTSA staff regularly interacts with other professionals in driver licensing and driver education. Staff is involved in various related working committees of professional organizations such as the American Driver and Traffic Safety Education Association, and works with private organizations such as the American Automobile Association.

## DRIVER EDUCATION WORKSHOP

Mr. CARR. What did you learn from the workshop you held last April on how driver education for the young driver could be improved?

[The information follows:]

The workshop resulted in a number of general findings and recommendations. The following summarizes the findings of this group related to driver education:

No one traffic safety countermeasure will drastically reduce the crashes of young drivers. A "systems" approach is needed. Such a system should include driver licensing, driver education, traffic law enforcement, and public information and education.

Novice driver education (30 classroom hours & 6 behind-the-wheel) does result in most students getting a driver license; however, it does not develop safe driving behaviors that reduce the crashes of young drivers.

Driver education should be an integrated part of a graduated driver licensing system. Keeping a driver license will provide the student with the motivation to learn safe driving behaviors. Being part of a graduated license system will require the student to practice safe driving.

Teaching a new driver to be a safe driver needs to be done over an extended period. Instruction should be self-paced, where possible, with appropriate feedback, and with progress being determined by skill and knowledge testing.

Training that emphasizes safe driving skills should only be given after the student has some amount of basic behind-the-wheel experience.

Novice driver training must include all types of driving situations that will be encountered by the new driver.

State-of-art PC-based simulation technology may be useful for some aspects of training and educating new drivers.

Development of a new driver education program will likely require changes in materials for and preparation of teachers and instructors. Administrative and development processes for upgrading the driver education program may also be necessary.

## CONTINUING DRIVER EDUCATION

Mr. CARR. You may recall that my interest in driver education is not limited to young drivers, but extends to the older driver as well. Does the action plan that you are working on address the issue of making driver education a lifetime learning process?

[The information follows:]

The research agenda that is proposed only deals with a new driver education system for the novice driver. Because of their over involvement in crashes, it is critical to provide a sound basis for educating new drivers. Once NHTSA has developed such a system, resources can be extended to determine how to most efficiently develop education programs for a lifetime of learning safe driving behaviors. Major issues concern how to reach the adult driver with educational material and how to motivate the adult to learn the material. Possible channels include driver licensing renewals, and various forms of public information and education. NHTSA's research program on older drivers addresses many of these issues and will provide the foundations for developing suitable information and education programs.

## DRIVER EDUCATION PROGRAM GOALS

Mr. CARR. What specific goals and objectives have you established for NHTSA's driver education program?

[The information follows:]

The goal of NHTSA's program in driver education is to produce a lifetime of improved safety, beginning with young novice drivers, through increasing knowledge, improving attitudes, and enhancing decision-making skills. NHTSA's research and program plans will be described in detail in the agency's report to Congress.

## DRIVER EDUCATION AND IVHS TECHNOLOGIES

Mr. CARR. To what extent will your driver education agenda address advances in intelligent vehicle highway system technologies? Do driver education programs offer one of the best avenues available for advising a large number of drivers about the availability and potential of IVHS technologies?

[The information follows:]

As IVHS technologies that affect safe driving become operational, these advances should be considered for driver education programs. However, driver education programs currently do not offer a very good avenue for advising drivers of IVHS because the vast majority of drivers, including new drivers, do not participate in any type of formal driver education. The extent to which driver education can include IVHS issues will be limited by the balance of time and monetary resources across all the requirements placed on the curriculum.

## NCAP PUBLIC PLANNING MEETING

Mr. CARR. Last year, NHTSA changed the format of the New Car Assessment Program (NCAP) press release to a "star" rating system to make it more user friendly. Five stars indicates the best safety rating and one star indicates the worst safety rating.

NHTSA recently published a notice in the Federal Register soliciting comments on the desirability of holding a public meeting to discuss NCAP activities. I wonder why you did not hold such a meeting before undertaking a restructuring of the NCAP format and proposing the inclusion of side impact tests, rather than after the fact. Would you comment?

[The information follows:]

With respect to the addition of side impact testing to the NCAP program, the agency has long considered such an addition as a logical step since side impact fatalities are second to only frontal impact deaths.

On January 18, 1991, at a public meeting following the quarterly industry meeting, the agency announced its desire and intention to conduct a Side Impact NCAP. Subsequent to this, NHTSA Docket No. 91–02 was opened to receive public comments on the issue. This was almost three years before the notice in question. In FY 1992, funds were appropriated by Congress for developmental testing. In FY 1993, the funds were appropriated and the agency completed the steps necessary to establish the requirements and procedures for a possible Side Impact NCAP.

With respect to restructuring the NCAP format, the agency and the Congress have both fostered continual improvement of the NCAP program to make the available information more easily understandable by consumers and more useful as a market incentive. The October 1991 Conference Report provided an allowance of not less than $150,000 for NHTSA to use for the purpose indicated above during FY 1992. In order to provide a comprehensive and timely response to the Congress, the agency transmitted a report to Congress in February 1992 which outlined our plan for responding to the Congressional directives. That plan proposed the use of focus groups to evaluate various presentation methods on the car buying public. The report to Congress was made publicly available, and placed in our docket. The most recent restructuring of the NCAP format is an outgrowth of the information obtained from the focus groups.

The proposed restructured NCAP format was discussed at length before its implementation at a public NHTSA/Industry meeting in Detroit, Michigan, on October 13, 1993. At that meeting, a draft of the proposed changes was handed out and comment solicited. In addition, representatives of the agency later met with the A.A.M.A. at their request to discuss the proposal and agree upon suggested revisions.

Thus, although a separate public meeting was not held prior to restructuring the NCAP format and proposing the inclusion of side impact tests, ample opportunity for public comment and suggestion was provided. The proposed consideration of a formal public meeting is intended to evaluate the success of the changes NHTSA has implemented thus far and to solicit further suggestions for modifying and/or expanding NCAP.

## NCAP PUBLIC MEETING GOALS

Mr. CARR. What are your goals for such a public meeting and what response to your proposal have your received?

[The information follows:]

The major goal is to solicit suggestions for how the agency might best provide vehicle safety information to consumers.

Responses to the notice which requested comments on whether the agency should have a public meeting were received from two automobile manufacturer associations (American Automobile Manufacturers Association and the Association of International Automobile Manufactures), three individual automobile manufacturers (Toyota, Volkswagen, and Volvo), one insurance group (the Insurance Institute for Highway Safety), and four consumer advocacy groups (Advocates for Highway and Auto Safety, Center for Auto Safety, Public Citizen, and Institute for Injury Reduction). Of those ten respondents, all except Toyota and Volkswagen supported such a public meeting. Toyota and Volkswagen indicated objections to the existing NCAP, but did not state whether they were for or against the proposed public meeting.

## CLEAN CAR—NHTSA PARTICIPATION

Mr. CARR. In recent months, we have heard more about the administration's new clean car initiative to accelerate the development of ultra-fuel efficient, ultra-clean vehicles. As I understand it, the program will be a cooperative research program between primarily the U.S. Department of Energy and the three major domestic automakers with a goal of producing a family car with three times the fuel efficiency of today's car. Is NHTSA participating in this government industry initiative and, if so, what are the specific goals for your involvement?

[The information follows:]

Yes, NHTSA is involved. NHTSA's Associate Administrator for Research and Development represents the Department Transportation on the government's Technical Committee, which is chaired by the Department of Commerce.

NHTSA's role is to insure generally that improved safety is pursued in the program NHTSA will work within the partnership to find innovative solutions to assure that vehicles resulting from this program, which could be the basis for vehicles offered for sale in about 10 years, (1) contain the same improved safety levels that will be required by regulation of all other vehicles produced at that time, (2) include the appropriate advanced structural and occupant protection systems needed for equivalent safety compared to comparable, conventional mid-size sedans, and (3) contain the same safety features, such as collision avoidance IVHS systems, as contained on other vehicles produced at that time. NHTSA also will work within the partnership to insure the safety of advanced energy storage and energy conversion technologies selected for use in the program.

## CLEAN CAR PROGRAM—IMPACT ON CAFE

Mr. CARR. Does the clear car initiative represent a change in the administration's policy approach to fuel economy? Is the administration rethinking the regulatory approach of the CAFE standards in light of this new initiative?

[The information follows:]

The Clean Car program is a cooperative research program with the auto industry; it does not represent a change in Administration policy relative to fuel economy. We currently have no plans to propose changes in the regulatory approach of the CAFE standards in light of the Clean Car program.

## FUEL ECONOMY TECHNOLOGY STUDIES

Mr. CARR. The fiscal year 1995 request for NHTSA includes $785,000 for NHTSA to study various emerging technologies that show promise of significantly improving the fuel economy of vehicles in the next five to 10 years. Last year, we denied this request. Why did you decide to renew your request this year?

[The information follows:]

One of the statements in the National Academy of Sciences (NAS) 1992 report, Automotive Fuel Economy—How Far Should We Go?, was:

In the committee's opinion, if the federal government intends to continue regulating automotive fuel economy, it must take a more substantial investment in understanding the technical issues, costs, benefits, and risks of such regulation.

Towards this end, the agency initiated in FY 1993 a database providing details of U.S., Canada, and Mexico automotive manufacturing facilities. The database will provide details of plant capacities, products, and product plans, along with financial information. The maintenance of this database requires an annual commitment of $60 thousand.

The subjects of technical issues, costs, and benefits of fuel economy technology mentioned by the NAS have not been addressed in any agency studies due to lack of funding. The last study of this type was a small study on engine friction reduction completed in 1988. This technology has now been largely implemented throughout the automotive industry. Without new studies, the agency will continue to rely on industry submissions and media articles which do not provide an independent view of potential technological advances.

The agency is proposing to establish light truck fuel economy standards through model year 2006 in one rulemaking to provide long leadtime to the industry. Therefore, NHTSA desires to conduct independent studies of technology to insure integrity to these future rulemaking efforts.

## CLEAN CAR PROGRAM FUEL ECONOMY INITIATIVES

Mr. CARR. How does this fuel economy initiative relate to the government industry clean car initiative?

[The information follows:]

This request is not related to the "Clean Car" initiative. The fiscal year 1995 fuel economy initiative is intended to support the agency's statutory responsibility for the fuel economy regulatory program. The primary goal of the "Clean Car" initiative is to explore the use of radically different energy storage and energy conversion technology in addition to other radically different automotive technology in order to achieve a three times improvement in fuel economy while maintaining utility compared to today's conventional mid-size sedans. If this goal can be reached, it is envisioned that resulting vehicles will be in demand by the public and sell in high quantities, thus reducing the Nation's use of energy through the demand for cars that meet consumer needs.

## ALTERNATIVE FUELS PROGRAM

Mr. CARR. Would you update the subcommittee on NHTSA's work pertaining to the electric car and vehicles fueled with compressed natural gas?

[The information follows:]

Regarding research on electric vehicles, NHTSA testing conducted in Fall 1993 indicated potential safety issues that may merit further investigation, involving electrolyte spillage and post-crash shock hazard. NHTSA crash-tested two converted electric vehicles equipped with lead acid batteries, conducting frontal barrier crashes at 48 km/h. In both crashes, the batteries sustained serious damage. Large amounts of electrolyte were spilled (10.4 liters and 17.7 liters) when the batteries were crushed. The potential toxicity of the acid in the electrolyte solution makes this an area of potential concern, regarding injury to both vehicle occupants and individuals outside the vehicle. Electric shock is a second potential hazard with electric vehicles. Several arcs were evident under the hood of one vehicle during NHTSA's electric vehicle crash tests. Shock hazard can occur at crash sites, with danger to occupants, emergency medical technicians, and other first responders. There also is the danger of electronic shock to mechanics during repair of the vehicle.

Regarding compressed natural gas (CNG) vehicles, NHTSA crash tested a converted CNG vehicle to assess its fuel system integrity performance, in support of the agency's CNG rulemaking in this area. In 1994, the agency plans to initiate a study of anecdotal information which alternative fuel fleet operators, including CNG and electric vehicles, can provide regarding the safe performance of their vehicles. These fleet operators have day-to-day contact with the vehicles, and their accumulated experience will hopefully provide a useful real-world perspective on safety problems to supplement the agency's other sources of information.

## ELECTRIC VEHICLE SAFETY

Mr. CARR. What unique safety issues are presented by the automobile industry's ongoing development of electric vehicles, and where is NHTSA placing its research emphasis?

[The information follows:]

Potential safety issues that merit investigation include electrolyte spillage and post-crash shock hazard. In the Fall of 1993, NHTSA performed crash tests on two commercially available electric conversion vehicles. These tests resulted in the loss of substantial quantities of electrolyte from the lead acid battery packs. The potential toxicity of the acid in the electrolyte solution makes this an area of concern, regarding injury to both vehicle occupants and individuals outside the vehicle. Additionally, arcing was observed under the hood of one vehicle, raising a concern regarding electric shock. Shock hazard can occur at crash sites, with danger to occupants, emergency medical technicians, and other first responders. There also is the danger of electric shock to mechanics during repair of the vehicle. NHTSA's research emphasis will be to support the agency's efforts to address these issues, as further defined based on information provided by commenters in response to NHTSA's anticipated electric vehicle safety Request for Comment, to be published later this year.

### ELECTRIC VEHICLE RULEMAKING

Mr. CARR. Where do you stand on rulemaking activities?

[The information follows:]

Regarding electric vehicles, NHTSA in 1992 determined that new safety standards for electric vehicles were not required at that time. Based on subsequent research the agency has determined that further investigation is merited, particularly in the areas of electrolyte spillage and post-crash shock hazard. Therefore, in 1994, the agency plans to publish a Notice for Comment to seek public participation in its effort to better understand the extent and severity of these problems, and to learn what steps manufacturers, voluntary industry groups, and others are taking to address them. With this broadened perspective, NHTSA can better determine if federal involvement is merited.

With respect to compressed natural gas (CNG) vehicles, the agency expects to issue two final rules. One would regulate CNG vehicles to assure fuel system integrity performance in crashes, and would apply to vehicles of 10,000 pounds or less gross vehicle weight rating (GVWR) and all school buses. The second final rule would regulate the initial strength, durability, and pressure relief performance of CNG fuel containers. In addition, in 1994 the agency expects to issue a supplemental notice of proposed rulemaking for CNG fuel containers to regulate their performance regarding corrosion, brittle fracture, and external damage. Finally, the agency expects to issue a Federal Register notice seeking public comment on CNG vehicle fuel system integrity performance needs for transit buses and other vehicles of over 10,000 pounds GVWR.

### NADS—NON-FEDERAL MATCHING FUNDS

Mr. CARR. Your fiscal year 1995 budget estimate includes $2.0 million toward the construction cost of the national advanced driving simulator (NADS). As you know, the conferees on the California earthquake emergency supplemental bill agree to rescind unobligated balances previously appropriated for NADS unless the University of Iowa raises $7.75 million of the required non-Federal matching funds by the time of conference on the fiscal year 1995 bill. What specific actions have been taken by NHTSA and the University of Iowa to raise the required matching funds for the driving simulator?

[The information follows:]

NHTSA has met with senior executives of the domestic auto industry on nine separate occasions seeking their financial participation in the NADS project. In addition, NHTSA has written a total of 114 letters to the heads of the U.S. auto and truck manufacturers and their suppliers soliciting their support. The University of Iowa has made well over 500 industrial contacts. As a result, 119 separate private companies have visited the University of Iowa to discuss NADS participation. In addition the University of Iowa has had multiple meetings with major U.S. and Japanese manufacturers. NHTSA also has initiated efforts with the medical and health sciences community to establish the potential of simulation in medical research related to driving. This past year NHTSA sponsored a conference at the University of Virginia Health Sciences Center on this subject and in the coming year the agency, together with the University of Iowa Medical School, will jointly sponsor a follow-on national conference. A major goal of this conference will be to seek financial support for the NADS development.

Mr. CARR. How much has been raised to date, beyond the $5.25 million initially committed by the University of Iowa?

[The information follows:]

NHTSA and the University of Iowa have made a major effort to encourage the domestic auto industry to participate in the NADS development. In addition, the agency and the University of Iowa have initiated efforts to encourage the medical and health science community to support the project financially. Although these efforts have not resulted in firm commitments to date, we are hopeful that the auto industry, research community, and health sciences community will ultimately join NHTSA in supporting the project.

### NADS—VEHICLE MANUFACTURER RESPONSE

Mr. CARR. A May 1993 letter from the American Automobile Manufacturers Association indicated that:

> The vehicle simulation needs of our member companies are being adequately met through the use of special purpose simulators. Nevertheless, we intend to monitor closely the NHTSA experience with NADS in the future. After the NADS program is operational and some experience base is developed, we will be in a better position to evaluate its potential use by our members.

Have you had a further, more positive response from the automobile industry regarding their financial support for the construction of the simulator?

[The information follows:]

NHTSA is continuing its discussions with senior auto industry executives concerning NADS cost sharing. Although no commitments have yet been received, we believe that they will ultimately be forthcoming, along with other sources we are pursuing.

### NADS—ACQUISITION COST CONTRIBUTORS

Mr. CARR. Who would be the most likely contributors to the acquisition costs of the simulator at this point?

[The information follows:]

It is NHTSA's opinion that the most likely contributors of NADS cost sharing are the domestic and transplant auto manufacturers, auto importers, the Department of Defense, and the Department of Health and Human Services.

### NADS—CONTRACT AWARD STATUS

Mr. CARR. Please update us on the status of the NADS project, and indicate what contracts have been awarded for system engineering, design and fabrication, software development, and computer support.

[The information follows:]

The Request For Proposal (RFP) for the National Advanced Driving Simulator (NADS) was released to industry on July 14, 1993. Proposals were received on August 27, 1993, from Contraves, Inc., Science Applications International Corporation (SAIC), and TRW, Inc. TRW, Inc., and Contraves, Inc., were selected and awarded a Design Competition contract on January 27, 1994. TRW and Contraves are currently executing their firm fixed-price contracts.

### NADS—ACTIVITIES PLANNED

Mr. CARR. What are your planned activities for the NADS project for the remainder of fiscal year 1994?

[The information follows:]

The two competitive NADS design contracts were awarded to TRW and Contraves on January 27, 1994. During the remainder of FY 1994, NHTSA will manage these contracts with the two major milestones being the System Design Review and Preliminary Design Review in preparation for the selection of the winning design in accordance with the provisions of the contracts. Contract deliverables will be evaluated and formal responses provided.

### NADS—FUND OBLIGATION SCHEDULE

Mr. CARR. Your fiscal year 1995 request includes $2.0 million for partial funding of the cost of building the driving simulator. Please explain why the funds are needed in fiscal year 1995 and indicate when you anticipate obligating the funds.

[The information follows:]

The NADS Phase I, Design Competition is a 13-month contract which was awarded to two contractors in January 1994 and which will be completed in February 1995. At the conclusion of the two design contracts, NHTSA will select a single contractor to proceed with the Phase II, system development, fabrication, integration, testing, and installation at the University of Iowa. The final contractor selection process will be completed by the middle of calendar year 1995. Funds will then be required to implement the Phase II contract.

## IVHS PROGRAM STATUS

Mr. CARR. Please bring the Committee up to date on the status of your IVHS program and the major milestones you have achieved.

[The information follows:]

The following is a status report on IVHS in NHTSA:

## A STATUS REPORT ON IVHS IN NHTSA

The NHTSA IVHS program made significant progress in 1993 in implementing the agency's strategic plan to facilitate development and early deployment of cost-effective, user-friendly collision avoidance systems and to ensure no loss of safety as these systems are introduced into motor vehicles.

The program includes an expanding crash avoidance knowledge base; development of a vital set of research tools, including the National Advanced Driving Simulator; identification of crash avoidance opportunities; examination of key human factors and system design issues; and development of performance specifications for crash avoidance products and systems. These specifications will define performance characteristics in engineering and human factors terms and will help guide product development toward achievement of maximum safety potential.

The most significant accomplishments were the award of four multi-year contracts worth $16.5 million to develop performance guidelines for collision avoidance systems, the award of the competitive design contracts for the National Advanced Driving Simulator (NADS), and the impending award of cooperative agreement with multiple industrial partners to accelerate the development of needed enabling technologies and/or collision avoidance systems.

The NHTSA strategic plan is comprised of five major elements. Each element is described below in the context of on-going projects contributing to the element goals.

RESEARCH TOOLS AND KNOWLEDGE BASE - The agency has defined goals for obtaining the research and analysis tools necessary to evaluate crash avoidance concepts and products and using these tools to develop a greatly expanded knowledge base of driver-vehicle performance and behavior needed to support safety system development. These tools/data are vital to understanding and documenting the safety benefits and potential liabilities associated with the design and deployment of IVHS products.

o The Oak Ridge National Laboratory is developing a portable driver performance data acquisition system for acquiring driver-vehicle performance data in-situ

o The University of Michigan Transportation Research Institute is developing a data acquisition/analysis system which can be used to characterize the vehicle motion environment, i.e., quantify normal vehicle motion in traffi relative to the other vehicles present on the roadway.

o The Jet Propulsion Laboratory is assessing the needs for a variable dynamic testbed vehicle for use in supporting IVHS, AHS, and NADS.

o Design teams led by TRW and Contraves are developing competitive designs for the National Advanced Driving Simulator (NADS). The team with the winning design will be selected to construct the NADS.

o Battelle is developing a workload assessment protocol for use in establishing today's baseline workload and in evaluating the effects of the addition of high technology systems on driver safety performance.

o COMSIS is identifying requirements for effective in-vehicle warning system design. A draft guideline document has been completed.

o Millitech Corporation is assessing the potential health hazard from IVHS-induced electro-magnetic radiation resulting from the widespread usage of IVHS collision avoidance systems.

o Catholic University is addressing crash avoidance and the older driver, i.e., analyzing their crash experience, assessing their capabilities/limitations, and evaluating design features to ensure safety while maintaining their mobility

DEFINING CRASH AVOIDANCE OPPORTUNITIES - NHTSA is helping to guide the development of crash avoidance technology by identifying the types of countermeasures that are likely to give major benefit to the public. By careful analyses of the precrash circumstances associated with various crash modes, critical driving hazards can be identified. Countermeasures that address these hazards can then be specified in performance terms that match real needs.

o A series of reports have been published (or are currently being published) characterizing the following crash types rear-end, backing, and lane change. In review are reports addressing single-vehicle run-off-road and intersection crashes. Planned are head-on and drowsy driver. For each crash type, two reports are prepared - a problem size assessment and statistical description and a countermeasure assessment.

DEMONSTRATING PROOF OF CONCEPT - A key responsibility of NHTSA is to demonstrate that advanced technology can practicably enhance the crash avoidance performance of motor vehicles. The agency is currently developing performance guidelines for systems to address the following crash types.

- Lane change, merging and backing collisions (TRW)
- Rear-end collisions (Frontier Engineering)
- Intersection collisions (Calspan)
- Roadway departure collisions (Carnegie-Mellon University)
- Vision enhancement system (Carnegie-Mellon Research Institute)
- Detection of driver drowsiness (Virginia Polytechnic Institute and State University)
- Systems to automatically notify emergency medical services (EMS) dispatcher of the occurrence and location of a crash (Johns Hopkins Applied Physics Laboratory)

FACILITATING COMMERCIAL DEVELOPMENT - Public benefits come only through actual commercialization of safety-effective products. NHTSA is working with industry to facilitate the development and early deployment of collision avoidance systems.

NHTSA has awarded three cooperative agreements with industrial partners in the following areas:

- Automatic braking for heavy vehicles (Eaton)
- Forward looking radar sensors (TRW and ERIM)
- Vehicle-based lane detection (Rockwell)

Final negotiations are underway with two additional industrial partners in the following areas:

- Forward crash avoidance systems
- Human factors aspects of intelligent cruise control

ASSESSING SAFETY OF OTHER SYSTEMS - There are many IVHS concepts which entail functions other than crash avoidance, but nevertheless influence the driving task. A fundamental goal of this work is to ensure that mobility- and productivity-enhancing systems do not degrade motor vehicle safety.

NHTSA continues to work with FHWA to ensure that systems for improving mobility and productivity do not degrade motor vehicle safety.

- Travtek
- Travelaid
- ADVANCE
- FAST-TRAC

## IVHS—AUTOMOBILE INDUSTRY COMMITMENT

Mr. CARR. Many of the IVHS technologies that NHTSA seeks to advance do not depend on communication with the highway infrastructure, but are autonomous in vehicle devices whose introduction into the marketplace will be determined by the automobile manufacturers and the driving public. How do you respond to some observers who believe that one of the barriers to IVHS implementation is a lack of commitment by the automobile industry?

[The information follows:]

The automotive industry includes major vehicle manufacturers plus an extensive supplier industry. NHTSA's view is that there are many companies that are committed to development of IVHS products which will improve motor vehicle safety. This assessment is based on the agency's understanding of the research and product development projects which companies have shared with the agency and on their interest in participating cooperative projects with the agency. Another indication of their commitment is membership and active in participation in the activities of the Intelligent Vehicle Highway Society of America (IVHS America).

## IVHS—INDUSTRY INTEREST IN TECHNOLOGIES

Mr. CARR. What is NHTSA's assessment of the extent of the automobile industry's interest in vehicle IVHS technologies?

[The information follows:]

The automotive industry is not a homogenous entity. In our judgment, the automobile industry's interest in developing in-vehicle technologies is generally high. However, all companies do not have the same priorities; for example, some companies are developing safety-related products such as intelligent cruise control systems while others have placed a higher priority on systems such as route-guidance and navigation. This difference in priority is related to the fact that the automotive industry is very competitive and market-driven and that each company has unique assessments of market opportunities, liability issues, and other considerations.

## IVHS—COMMERCIAL VEHICLE INNOVATIONS

Mr. CARR. Some in-vehicle IVHS innovations, such as the Greyhound/VORAD system which provides Greyhound bus drivers with information about distance and closing rate between vehicles, are now in use. What other in-vehicle innovations are most likely to be commercially available in the near future?

[The information follows:]

The following collision avoidance products and activities are available today or should be available in the near-term: radar-, infrared-, and/or ultrasonic-based near object detection systems looking to the side and rear are available today as aftermarket products; forward looking sensors are available for incorporation into collision avoidance systems, e.g., the Vorad-based system on Greyhound buses; active work within the industry to develop intelligent cruise control systems and night vision enhancement systems; and Delco FOREWARN system that monitors the area around and under school buses for the presence of children.

## IVHS—COOPERATIVE AGREEMENTS WITH INDUSTRY

Mr. CARR. NHTSA's IVHS plan states that "In general, the highly uncharted nature of IVHS concepts suggests that cooperation with industry will be essential if the full potential of technology is to be realized." What cooperative agreements have been signed, and how does NHTSA plan to work with industry to facilitate the commercial development and introduction of in vehicle IVHS technologies?

[The information follows:]

The agency is aggressively pursuing several approaches to working with industry to facilitate the commercial development and early deployment of in-vehicle IVHS technologies. One of these approaches is the development of formal cooperative agreements on topics of mutual interest. The agency has recently entered into three cooperative agreements and expects to finalize two additional cooperative agreements within the next month. The three that have been initiated are:

A project to demonstrate the feasibility of automatic braking on heavy vehicles (Eaton Corporation)

A project to study problems of target acquisition when using radar systems (Environmental Research Institute of Michigan and TRW)

Forward-looking crash avoidance systems (Rockwell)

The other two cooperative agreements will address:

Human factors aspects of intelligent cruise control systems

Vehicle-based lane detection systems

Other approaches include support for the IVHS IDEA program which is administered by the National Academy of Sciences, partnerships to assess the performance of emerging technologies in operational tests, and working jointly with industry representatives in technical committees of professional organizations such as the Society of Automotive Engineers and IVHS America.

## IVHS—CRASH AVOIDANCE TECHNOLOGY

Mr. CARR. The NHTSA IVHS plan suggests that "NHTSA will encourage the development of a crash avoidance technology when its apparent safety benefit is compellingly high, but where adequate market incentives do not exist for industry development." Can you give us any examples of any potential IVHS technologies that might fall into this category?

[The information follows:]

It is too early in the program to identify which, if any, IVHS technologies will fall in this category. The agency, however, is not aware of any companies that currently have product development plans in areas such as intersection collision avoidance systems and systems for automatically informing emergency medical service dispatchers of the occurrence of a collision.

## IVHS—ADDRESSABLE SAFETY HAZARDS

Mr. CARR. What critical driving hazards and accident modes has NHTSA identified as being the most promising to be addressed through IVHS technologies?

[The information follows:]

Agency analysis and an assessment of industry activity has identified the following seven collision types as the targets for initial emphasis: rearend collisions; lane-change and merge collisions; collisions while backing; road-departure collisions; collisions at intersections; collisions associated with drowsy drivers; and collisions associated with conditions or reduced vision. The agency has work underway to address each of these types.

## IVHS—CRASH AVOIDANCE TECHNOLOGY BENEFITS

Mr. CARR. Have you determined the safety benefits of any specific collision avoidance IVHS technologies, such as intelligent cruise control systems, automatic braking devices, et cetera?

[The information follows:]

The agency has completed preliminary problem size definition studies for a variety of collision types, i.e., assessed the target of opportunity for IVHS-based collision avoidance systems. However, in order to predict safety benefits, one needs to define system effectiveness and market penetration. Since collision avoidance systems are not yet available, the agency does not have the information necessary to determine safety benefits. Estimation of benefits is a major aspect of NHTSA's IVHS program, and steps are being taken to acquire the necessary tools and data to be able to carry out that analyses.

## IVHS—TRAVTEK EVALUATION

Mr. CARR. NHTSA is currently working with FHWA on the evaluation of several large scale IVHS operational tests. One of NHTSA's roles is to evaluate whether in vehicle route guidance/navigation systems result in driver overload to the detriment of safety. Can you share with us any preliminary findings regarding your safety evaluation of the TravTek operational test which is scheduled to be completed by mid year?

[The information follows:]

The analysis of data from the TravTek operational test has not yet been completed. Preliminary analysis suggests that the collision rate of the test vehicles was not different than the national average. The preliminary analysis also indicates that visual turn-by-turn instructions with voice backup results in the safest driving performance relative to other driving conditions (e.g., moving map displays without voice backup) and that the level of safety was not the same for all display configurations. Finally, the preliminary analysis of data from questionnaires suggests that drivers believed they had fewer close-calls with the TravTek system than with their own vehicle. However, a subset of drivers perceived that some of the close-calls may have been related to use of the TravTek system.

## FUEL SYSTEM INTEGRITY—REQUEST FOR COMMENTS

Mr. CARR. In December of 1992, the agency published a request for comments regarding standard 301 on fuel integrity. Could you tell me what was the purpose of the request and where you are in the process?

[The information follows:]

On December 14, 1992, the agency published a Request for Comments notice related to possible rulemaking to upgrade Federal Motor Vehicle Safety Standard (FMVSS) No. 301, "Fuel System Integrity," indicating that the agency is considering initiating rulemaking to upgrade the protection currently provided by this standard. The agency issued this notice because of its continuing desire to reduce the number of fire-related casualties to occupants of passenger cars and light trucks, and because of the results of an agency report on the effectiveness of FMVSS No. 301. While earlier evaluation studies had indicated that FMVSS No. 301 had been effective in reducing post-crash fires and fatalities, the most recent evaluation report ("Motor Vehicle Fires in Traffic Crashes and the Effects of the Fuel System Integrity Standard;" DOT HS 807675) reached different conclusions. Although the study found that FMVSS No. 301 reduced post-cash fires for passenger cars, it did not find any statistically significant reductions in fire-related injuries or fatalities. For light trucks, the evaluation found that implementation of the standard may have had no effect at all.

Commenters raised issues regarding safety need, the adequacy of the current test procedures, the availability and necessity of developing new test procedures, and the existence and feasibility of countermeasures. Based on the comments received in response to the notice and agency analyses, the agency initiated several research tasks. The agency has completed some of the planned tasks which include 7 baseline vehicle tests with experimental test procedures. The agency has also conducted detailed analyses of accident files to identify potential areas for upgrading the standard. Based on these research results, the agency hopes to make a decision before September 1994 on future rulemaking directions for this standard.

## ELECTRICAL FUEL PUMP/LINE FIRES

Mr. CARR. Are you examining the issue of electrical fuel pumps and ruptured fuel lines and how that may increase the risk of fires and casualties?

[The information follows:]

On December 14, 1992, the agency published a Request for Comments notice related to possible rulemaking to upgrade Federal Motor Vehicle Safety Standard (FMVSS) No. 301, "Fuel System Integrity," for all types of crash modes.

The agency is conducting laboratory crash testing and accident data analyses to better define the fire safety problem and to identify possible mitigation concepts. These efforts should help clarify directions for future regulatory actions. These may include modifying the full-scale crash tests presently used in the standard to address higher crash severities and the use of different test barriers. In addition, specific performance criteria may be developed for individual components such as the fuel pump and fuel lines.

NHTSA is aware of different commercially available safety devices including electrical fuel pump shut-off valves and frangible fuel line valves that could improve fuel system integrity. The agency will be examining these and other countermeasures along with alternative crash test conditions in evaluating the feasibility of upgrading the standard.

## ADVANCED TECHNOLOGY FOR FMVSS 301 COMPLIANCE

Mr. Carr. I understand that the various automakers use different strategies to meet the current standard. Have there been advances in the technology that would reduce the risk of ruptured fuel lines and are you considering further regulations in this regard?

[The information follows:]

On December 14, 1992, the agency published a Request for Comments notice related to possible rulemaking to upgrade Federal Motor Vehicle Safety Standard (FMVSS) No. 301, "Fuel System Integrity," for all types of crash modes.

The agency is conducting laboratory crash testing and accident data analyses to better define the fire safety problem and to identify possible mitigation concepts. These efforts should help clarify directions for future regulatory actions. These may include modifying the full-scale crash tests presently used in the standard to address higher crash severities and the use of different test barriers. In addition, specific performance criteria may be developed for individual components such as the fuel pump and fuel lines.

NHTSA is aware of different commercially available safety devices including electrical fuel pump shut-off values and frangible fuel line values that could improve fuel system integrity. The agency will be examining these and other countermeasures along with alternative crash test conditions in evaluating the feasibility of upgrading the standard.

## AMERICAN AUTOMOBILE LABELING ACT—COMPLIANCE PENALTY

Mr. Carr. A new law requiring automobile manufacturers to label the domestic and foreign content of new vehicles becomes effective October 1, 1994. As you know, I was the author of that law. The law states that, "The regulations shall be promulgated promptly in order to provide adequate lead time for all manufacturers to comply with this section." NHTSA has issued a notice of proposed rulemaking but not a final rule.

It seems to me that you have created a major problem for the manufacturers by delaying final action. The manufacturers are now faced with a situation where they need information from their suppliers, which in some cases number in the thousands, and you have not told them what information they need to comply with the law.

What is the penalty for noncompliance?

[The information follows:]

In answering this question, it must be emphasized that NHTSA has not delayed final action on this rulemaking. Rather, the time being spent on completing the rulemaking is a reflection of several factors. One is the mandate of the American Automobile Labeling Act for extensive and complicated reporting and calculation procedures. Another is the complexity and number of the public comments challenging the appropriateness of particular aspects of the proposal and, in many cases, making specific suggestions for alternative regulatory language. The agency must address the merits of not only those suggestions, but also the underlying challenges.

NHTSA is fully aware that several commenters on the notice of proposed rulemaking, including the American Automobile Manufacturers Association (AAMA), have argued that manufacturers and suppliers will not be able to comply with all the data collection and calculation requirements by the October 1994 implementation date. AAMA recommended that alternative requirements be established for the first year. The agency can assure you that it is seriously considering this comment, as well as all other significant comments, in the final rule.

The penalty for manufacturers which will fully fail to affix the required label to their vehicles and for dealers which fail to maintain the label is a civil penalty of "not more than $1,000." Each such failure with respect to each vehicle constitutes a separate offense. (section 210(e) of the Motor Vehicle Information and Cost Savings Act). Also, anyone, including suppliers, who fails to comply with rules prescribed under the American Automobile Labeling Act is subject to a civil penalty "not to exceed $1,000 for each violation" (sections 206, 208, and 210(d) of the Motor Vehicle Information and Cost Savings Act).

## AUTO LABELLING—MANUFACTURER COMPLIANCE

Mr. CARR. I want to keep all manufacturers' feet to the fire and ensure that the label is as accurate as possible. But, at the same time, I believe that manufacturers should not be penalized for your lack of action.

What consideration have you given to ways to recognize the manufacturers "best efforts" to comply with the law, including a possible grace period before enforcement begins?

[The information follows:]

The agency recognizes the short leadtime being provided in implementing the labeling system and will not strictly enforce the regulation the first year.

## AUTO LABELING—NHTSA CONTACT WITH MANUFACTURERS

Mr. CARR. I understand that several manufacturers have sought a meeting with NHTSA in the past several months to further explain their concerns about the proposed rule, and that NHTSA has refused to meet with them. Is that accurate? If so, why aren't you talking with the parties affected by the rule?

[The information follows:]

In the labelling rulemaking, the agency has provided a greater than usual opportunity for input from the manufacturers and other parties. Because of the complexity of the rulemaking, the agency voluntarily sought early on to initiate a dialogue with the public by inviting all interested persons to submit written suggestions regarding the implementing regulations before it even began to draft a proposal. The agency went even further and voluntarily held a public meeting at that time so that interested persons could make oral as well as written comments. Information and understanding gained from this active dialogue with the manufacturers and other parties aided us in developing a proposal for implementing the AALA's extensive and complicated reporting and calculation procedures.

However, with the closing of the comment period, concerns related to actual and perceived fairness and to the Administrative Procedure Act required that NHTSA protect the integrity of the rulemaking proceeding by curtailing its communication with the public. Pursuant to those concerns, the DOT General Counsel's Office has consistently and strongly discouraged oral communication with the public regarding a proposal after its comment period. An exception to this policy exists for instances in which an agency discerns, on its own initiative, a need to ask a commenter to clarify particular aspects of its written comments.

Thus, when Ford Motor Company submitted its written comments at the end of the comment period for the labelling proposal and simultaneously sought a meeting with the agency to explain its comments, NHTSA declined to do so. The agency saw no need to seek clarification from Ford.

It should be noted that Ford, and all other interested persons, remained free under the express terms of the proposal to submit written comments after the comment period. Ford could have supplemented its initial written comments with whatever explanatory *written* comments it wished. However, NHTSA has not received any further written comments from Ford since the closing of the comment period in mid-January.

## AUTO LABELLING—NHTSA "OPEN DOOR" POLICY

Mr. CARR. Can I get your commitment to having an "open door" policy in terms of communicating with the manufacturers or other organizations if such a meeting might clarify or improve NHTSA's information base?

[The information follows:]

NHTSA is committed to an open dialogue with the public regarding its rulemaking, to the full extent appropriate and permissible. The extent to which oral contacts are permissible varies with the stage of the rulemaking. Generally, such contacts become increasingly less permissible as a rulemaking proceeding advances through its various stages. Such contacts are the least permissible after the comment closing date.

When the agency finds a need to contact a party after a comment closing date to seek clarification of written comments submitted by that party, it may do so. In this case, NHTSA found no need to contact Ford Motor Company regarding its written comments on the labeling proposal.

## AUTO LABELLING—LABEL ON COSTS

Mr. CARR. What is the reason for the proposed addition of an explanatory note on the label itself, pointing out that only parts costs are included in the calculation content? This seems confusing and also contrary to your proposed rule which permits the inclusion of other types of costs. Would you comment?

[The information follows:]

The Notice of Proposed Rulemaking for Vehicle Content Labeling, published in the Federal Register on November 19, 1993 (58 FR 61042) proposed the addition of an explanatory note on the label. This proposed note was intended to clarify what the label represented. It was proposed in response to comments to the agency's request published in the Federal Register (57 FR 54351) on November 18, 1992. The actual wording or the inclusion of this note in the final rule has not yet been resolved by the agency.

## HIGHWAY LOSS DATA INSTITUTE STUDY ON ANTILOCK BRAKES

Mr. CARR. During the past few years, vehicle manufacturers have added antilock brake systems—ABS—as standard equipment on many cars and light trucks. However, several months ago, the Highway Loss Data Institute—HLDI—released the results of a study which concluded that antilock brakes on passenger cars are less effective in reducing crashes than previously thought.

The HLDI found that antilock brakes are not reducing either the frequency or the cost of on the road crashes that result in insurance claims for vehicle damage.

According to press accounts, some insurance companies are considering dropping their ABS discounts because of the HLDI results. Has NHTSA analyzed the HLDI study and do you agree with its conclusions? Do other studies confirm the HLDI findings?

[The information follows:]

We believe that it is premature to evaluate the benefits of ABS for passenger cars. The HLDI data mix all types of crashes, contain only a few makes and models, and contain a large percentage of low-speed collisions that are unlikely to be affected by ABS. Additional analyses are needed for specific types of crashes where ABS is most likely to have a significant effect. NHTSA data bases do not yet contain a sufficient number of accident cases involving late-model passenger cars equipped with ABS. A preliminary evaluation will be undertaken later this year when additional data become available.

NHTSA issued a preliminary evaluation of rear-wheel ABS for light trucks in December 1993. Although ABS had significant effects in certain types of crashes, the study did not show clear overall benefits for ABS. While ABS-equipped vehicles have performed impressively on the test track, NHTSA believes that the effect of ABS on actual crashes remains unknown at this time.

### ANTILOCK BRAKES—RISK-TAKING ACTIONS

Mr. CARR. Some observers have argued that the benefits of antilock brakes on cars and trucks are lost because drivers of vehicles with ABS take more risks, and also that they do not know how to use ABS correctly. What is your assessment of these factors?

[The information follows:]

Despite the growing amount of speculation on the subject, there have been no formal studies of how drivers of ABS-equipped vehicles use the systems, either properly or improperly. There is substantial past evidence, however, that in many crash-imminent situations, drivers slam on their brakes so hard they lock them, thereby losing stable control of the vehicle. ABS, if properly used, should eliminate braking-induced loss-of-control crashes, while providing drivers an opportunity to steer out of crash-imminent situations. NHTSA is aware, for example, that during the agency's recently-completed fleet evaluation of 200 ABS-equipped heavy trucks, drivers reported 34 incidents in which they felt ABS helped them avoid crashes. Despite these positive findings in the case of heavy trucks, many passenger car drivers may not properly use their ABSs because they are unfamiliar or uncomfortable with either the dynamic response of the vehicle or the brake pedal sensations, noises, or other feedback cues they receive when the ABS activates. NHTSA is aware of private sector plans to address some of these concerns by producing driver educational materials on the operation and proper use of ABS.

### ANTILOCK BRAKES—COST VS. BENEFITS

Mr. CARR. The widespread availability of antilock brakes in passenger cars is a relatively new phenomenon. Do you have sufficient data to assess the safety benefits and to judge whether those benefits might outweigh the $300–400 cost of ABS per vehicle?

[The information follows:]

The agency is currently conducting a study in order to quantify the safety benefits of antilock braking systems on passenger cars and other light vehicles. This data analysis is not yet complete, and therefore the agency is unable to make a judgment on whether the anticipated benefits would outweigh the per vehicle cost of antilock brakes. In the recently published advance notice of proposed rulemaking on light vehicle antilock braking systems, the agency is soliciting information on the safety benefits of antilock brakes.

### ANTILOCK BRAKES—U.S. SALES

Mr. CARR. What percentages of new light trucks and passenger cars sold in the United States are equipped with antilock brakes?

[The information follows:]

Approximately 80 percent of model year 1993 light trucks sold in the United States were equipped with an antilock brake system (ABS). Among model year 1993 domestic light trucks, 83 percent were equipped with an ABS system (52 percent with rear-wheel ABS and 31 percent with all-wheel ABS). Approximately 40 percent of model year 1993 passenger cars sold in the U.S. were equipped with all-wheel antilock brakes.

### ANTILOCK BRAKES RULEMAKING ISSUES

Mr. CARR. What specific issues are you considering in your advanced notice of rulemaking regarding antilock brakes in passenger cars and light trucks?

[The information follows:]

The Advance Notice of Proposed Rulemaking requests comments on the following issues relating to antilock braking systems on light vehicles; anticipated safety benefits from requiring light vehicles to be equipped with antilock braking systems; potential regulatory approaches to improve the lateral stability and control of light vehicles during braking, including a requirement for an antilock braking system and any anticipated performance requirements and test procedures; types of vehicles to which these requirements would apply, and whether all vehicles should be equipped with an all-wheel antilock braking system; schedule for implementing the antilock braking system requirement to maximize their benefits at a reasonable cost; and costs of requiring light vehicles to be equipped with antilock braking systems that would comply with the anticipated requirements.

### TRUCK ANTILOCK BRAKES COST/BENEFIT RATIOS

Mr. CARR. NHTSA also has rulemaking that is further along mandating antilock brakes for medium and heavy trucks. You have estimated that these ABS systems could increase the cost of truck tractors by about $1,661 and truck trailers by about $1,359.

What benefit/cost ratios do you estimate to justify these projected costs?

[The information follows:]

The anticipated safety benefits of requiring antilock braking systems on medium and heavy vehicles include preventing about 480 fatalities and 27,000 injuries, annually. The anticipated economic benefits include reducing property damage by about $600 million, annually, and this would result in a net consumer cost of requiring antilock braking systems to be about $470 million, annually. The agency does not base its regulatory decisions on cost/benefit grounds but instead examines the cost to the public of saving a life. In this case, considering only fatalities, the proposed rule would cost about $1 million for each life saved, making it extremely cost-effective compared to most safety and health rules issued by the Federal Government.

### TRUCK ANTILOCK BRAKE SAFETY BENEFITS

Mr. CARR. What are the safety benefits you estimate in terms of crashes prevented, lives saved and injuries reduced?

[The information follows:]

A preliminary regulatory impact analysis was performed using data for 1990. The results estimate that annually between 372 and 589 fatalities will be prevented; between 19,825 and 34,517 injuries will be prevented; and that between $541 million and $650 million in property damage will be saved. An updated analysis using statistics for 1992 is being prepared in support of rulemaking activities.

### TRAILER ANTILOCK BRAKE PHASE-IN SCHEDULE

Mr. CARR. NHTSA has proposed a phased implementation schedule of 1996 for truck tractors, 1997 for truck trailers, and 1998 for single unit trucks. The American Trucking Association has requested a longer transition period to ensure that the technology is reliable, safe and cost-effective.

What was your reason for rejecting ATA's request?

[The information follows:]

The American Trucking Associations (ATA) proposed an effective date after year 1999, in a comment to the notice of proposed rulemaking for equipping truck tractors and trucks with antilock braking systems. The agency believes that this effective date is too protracted, given that the current generation of antilock braking systems has been proven to be reliable by its successful use on several fleets in the U.S., and through the agency's own fleet testing. Similar antilock braking systems have been available on heavy vehicles in Europe since 1981. We see no need to delay the significant safety benefits associated with antilock brakes as would occur with adoption of the ATA recommendation.

## COMMERCIAL MOTOR CARRIER USE OF ANTILOCK BRAKES

Mr. CARR. In 1992, NHTSA recommended that motor carriers voluntarily add antilock brake equipped vehicles to their commercial fleets, based on the results of a NHTSA study of 200 heavy truck tractors equipped with antilock brake systems.

To what extent have commercial motor carriers done so?

[The information follows:]

Several large fleets such as KLLM, Manfredi Motor Transit Co., Chrysler Transport, Inc., and Super Valu Stores, Inc., are in the process of equipping 100 percent of their tractors with antilock brake systems (ABS). Matlack, Inc., a large tank carrier, has just bought 700 ABS-equipped tractors. Prior to 1992, ABS-equipped heavy truck tractor sales accounted for under 1 percent of total tractor sales. By March 1994, ABS-equipped heavy truck tractor sales represented 4–15 percent, depending on the manufacturer and the models available. Navistar and Freightliner are offering ABS as standard equipment on most of their heavy truck tractor models and Peterbilt expects to do the same by July 1994. The combined sales of these companies represent approximately 52 percent of the heavy truck tractor sales in the U.S. The remaining heavy truck tractor manufacturers are offering ABS as an option.

## SCHOOL AND TRANSIT BUS ANTILOCK BRAKE REQUIREMENTS

Mr. CARR. Will school and transit buses be required to have antilock brakes under NHTSA's proposed rulemaking? What are the expected benefits and costs?

[The information follows:]

Under the agency's proposal, school and transit buses would be required to be equipped with antilock braking systems (ABS). The agency estimated that the ABS unit cost for buses is $2,350 to the vehicle purchaser. However, the agency was not able to segregate the accident data on buses in the database because these vehicles are classified differently when reported by each state. In the regulatory analysis, the percentage of single unit truck crashes avoided, 6.1 percent, was used as an estimate of the benefits for school buses, since school buses are typically built on the same chassis used for single unit trucks.

The agency is currently updating the economic benefits with more recent cost data from the agency's cost study on heavy vehicle antilock braking systems. The preliminary estimates on which these costs are based will be revised significantly to reflect the lower ABS unit cost estimates from this study.

## TRUCK ANTILOCK BRAKE RULEMAKING SCHEDULE

Mr. CARR. Last year, NHTSA told the Subcommittee that it planned to complete the rulemaking on heavy truck antilock brakes by the end of calendar year 1993. However, you recently announced a six-month delay in the rulemaking which was first initiated two years ago.

What is the reason for the delay and what is your current schedule for a final rule?

[The information follows:]

The great level of interest, as evidenced by the large number of docket comments, and the complexity of the issues related to the rulemaking, made the initial rulemaking schedule impossible to meet. The Agency needed additional time to review the docket comments and to consider several of the issues related to requiring antilock braking systems on heavy vehicles. These issues included 1) the need to require antilock braking systems; 2) an appropriate definition of antilock braking systems that is sufficiently broad to cover all antilock systems that would significantly improve a vehicle's lateral stability and control by preventing wheel lock; 3) the need to include performance tests; 4) compatibility issues between tractors and trailers; and 5) the appropriate implementation schedule for different types of medium and heavy vehicles.

The Agency expects the final rule for the ABS on medium and heavy vehicles to be issued by June 8, 1994.

## HEAD INJURY RULEMAKING—NPRM RESULTS

Mr. CARR. NHTSA's proposed rule on interior head injury protection has been very controversial. As you know, the automobile manufacturers are very concerned about whether the rule will require the costly redesign of cars that they are working on now, and whether there will be adequate lead time for compliance. Last year, you reopened the comment period and also held a public meeting on the interior head protection rulemaking.

What issues were discussed at the public meeting and what have you learned since the notice of proposed rulemaking was issued in February 1993?

[The information follows:]

On November 15, 1993, the agency held a public meeting on head injury protection rulemaking. Representatives from the American Automobile Manufacturers Association, Chrysler, General Motors, Ford Motor Company, Liability Research Group and Advocates for Highway and Auto Safety, and Mr. Griswold, a private citizen, gave presentations at the meeting. Many issues, such as the lead-time/phase-in plan, the effect of padding on neck injuries and on driver's forward vision, potential limits of the proposed test device/procedure, and components to be excluded, were discussed at the meeting.

The agency has conducted additional accident data analyses and analytical/experimental studies in response to comments on the February 1993, notice of proposed rulemaking. The agency conducted airbag data analysis to determine the effect of airbags on head impacts against the A-pillar/front header components. The agency also examined the effect of padding on neck injuries using real world crash data and a finite element neck model. Other issues, such as test device/procedure, lead-time/phase-in plan, driver's forward vision, etc., also were studied by the agency using appropriate methods. The results of the studies will be used in arriving at our final decision.

## HEAD INJURY RULEMAKING—LIGHT TRUCKS AND VANS

Mr. CARR. The February 1993 proposed rule would require protection for the occupant's head against hard interior surfaces, such as the roof, side rails, et cetera. What was the rationale for including light trucks, buses and vans in the proposed rule as well as passenger cars?

[The information follows:]

In the National Highway Traffic Safety Administration Authorization Act of 1991, the Congress directed the agency to issue regulations on improved protection for head impact against upper interior components for passenger cars. On February 8, 1993, the agency published a notice of proposed rulemaking proposing head impact requirements for passenger cars, light trucks, buses and vans. The agency decided to include light trucks, buses and multi-purpose passenger vehicles in the final rule for the following reasons:

(1) Approximately 3,350 fatalities and 6,700 serious head injuries are estimated to occur annually in 1995 and beyond, resulting from head contacts with vehicle upper interior components. Approximately 12 percent of these fatalities and injuries are to occupants of light trucks, buses and multi-purpose passenger vehicles.

(2) With a few exceptions, the Federal Motor Vehicle Safety Standards prescribe the same levels of safety protection for all light passenger vehicles, regardless of vehicle types and seating positions. Several standards that applied only to passenger cars were extended recently to cover light trucks, buses and multi-purpose passenger vehicles.

(3) Most light trucks and vans are used today for private transportation purposes, as are passenger cars. Therefore, these vehicles should have the same types of improved safety protection as do cars.

## HEAD INJURY RUELMAKING—REAR PROTECTION BENEFITS

Mr. CARR. What comments has NHTSA received concerning proposed padding requirements for the rear seating positions of passenger cars and light trucks? What do you project the safety benefits to be?

[The information follows:]

The automobile industry recommended that the upper interior components behind the B-pillar be excluded from the final rule because of the low occupancy rates in rear seats. However, two safety organizations advocated that all pillars, side rails and headers be included in the final rule, regardless of occupancy rates.

Based on the Preliminary Regulatory Impact Analysis that accompanied the February 1993 notice of proposed rulemaking, the agency estimated that approximately 36 to 44 lives would be saved annually by padding the components behind the B-pillar.

## HEAD INJURY RULEMAKING—LEAD-TIME ISSUES

Mr. CARR. What is NHTSA's current thinking with regard to lead time issues and the potential phase-in of the new requirements for interior head impact protection?

[The information follows:]

After reviewing all comments in response to the February 1993 notice of proposed rulemaking, the agency is convinced that some manufacturers need a long lead-time because they produce a variety of vehicles, many of which will require extensive modification to meet the proposed requirements. The agency is considering adopting a phase-in plan but has not yet decided on its details.

## SIDE IMPACT—LIGHT TRUCK/VAN CRASHES

Mr. CARR. Side impact protection for light trucks and vans. As you know, ISTEA requires NHTSA to consider issuing a rule requiring dynamic side impact testing of light trucks and vans.

What are the fatality and injury statistics regarding side impact accidents involving light trucks and vans?

[The information follows:]

In 1992, side impacts involving light trucks and vans resulted in an estimated 1,560 fatalities and 132,000 injuries. Due to the growing number of light trucks and vans, it is estimated that side impacts will result in 1,750 fatalities annually by the mid-1990's. The extension of Standards No. 214 dynamic requirements to light trucks and vans would address one portion of this problem:—occupant fatalities and serious injuries that result from contact between the side interior of the light truck/van and the shoulder, chest, abdomen, back and pelvis. By the mid-1990's, it is estimated that this portion of the side impact problem (thoracic and pelvic injuries) will account each year for 250 light truck/van occupant fatalities and an additional 950 serious injuries.

## SIDE IMPACT—LIGHT TRUCK/VAN RULEMAKING

Mr. CARR. The issuance of a notice of rulemaking concerning side impact protection for light trucks and vans is being debated within NHTSA. Since light trucks and vans are safer in side crashes than cars, why do you believe that a more rigorous standard may be necessary?

[The information follows:]

Since a majority of light trucks and vans are used for private transportation purposes, these vehicles serve the same purpose as passenger cars. The agency's philosophy calls for not imposing a more rigorous standard to light trucks and vans, but rather requiring safety improvements when cost-effective.

## SIDE IMPACT RULEMAKING BENEFITS

Mr. CARR. In a December 1993 NHTSA meeting with the automobile industry, the associate administrator for rulemaking indicated that the benefits of dynamic side impact testing for light trucks and vans are likely to be small—from 20 to 90 lives saved a year. Is that your current assessment?

[The information follows:]

Yes. The estimated safety benefit of dynamic side impact testing for light trucks and vans is 20 to 90 lives saved each year.

## SIDE IMPACT REQUIREMENTS FOR LIGHT TRUCKS AND VANS

Mr. CARR. Beginning with the 1994 model year, a dynamic side impact test standard is being phased in for all passenger cars. Would it be wise to wait until the safety benefits of this requirement can be fully analyzed and understood before the requirement is extended to light trucks and vans?

[The information follows:]

The dynamic side impact requirements for passenger cars will affect 100 percent of these vehicles starting September 1, 1996. It is doubtful that sufficient accident data can be collected before 1999 for a rulemaking evaluation study on the dynamic side impact requirements for passenger cars because there will not be a sufficient number of vehicles in the fleet until that time. However, the agency is confident that the passenger car rule will yield significant safety benefits and believes these will carry over into light trucks. Since the agency has already identified the primary source of occupant injuries in side crashes, we believe it is appropriate to proceed with rulemaking activities on dynamic side impact requirements for light trucks and vans.

## ROLLOVER DEATHS AND INJURIES

Mr. CARR. Would you update us on the most recent figures regarding rollover injuries and fatalities?

[The information follows:]

The most recent data for which the agency has detailed tabulations is 1991. There were approximately 220,000 rollover crashes involving passenger cars, light trucks, vans and sport utility vehicles. Ninety-four percent were single vehicle crashes and 93 percent occurred off the road. The Fatal Accident Reporting System contains 9,186 fatalities resulting from rollover crashes. And approximately 56,000 vehicle occupants received serious, incapacitating injuries.

There has been little variation in these numbers over the past six years. The agency will perform detailed analyses of rollover crashes following implementation of any new regulations, in order to evaluate their effectiveness.

## ROLLOVER SUSCEPTIBILITY ANALYSIS

Mr. CARR. What have you learned in your statistical analysis of accident data regarding the vehicle types most susceptible to rollovers?

[The information follows:]

Based on analysis of the proportion of all single-vehicle accidents that became rollovers in Michigan in 1986–1990 it can be said that, in general, sport utility vehicles are most likely to roll over, followed by pickup trucks, vans and passenger cars. There are exceptions to the general trend, on a make/model level. One particular make of car may be more likely to roll than one particular make of pickup truck.

The average annual fatality rate (rollover fatalities per million registered vehicles) by vehicle type for 1985–1991 shows the rate highest in sport utility vehicles, followed by small pickups, standard pickups, small cars, standard vans, medium cars, small vans, and large cars. However, the largest absolute number of rollover fatalities is associated with small cars.

## DRIVER FACTORS IN ROLLOVER CRASHES

Mr. CARR. What driver characteristics are most associated with rollover accidents?

[The information follows:]

Driver age and alcohol or drug use. Younger drivers and impaired drivers are more likely to be involved in a single-vehicle rollover. However, these characteristics are less powerful in determining whether a single-vehicle crash becomes a rollover than the location of the road where the crash occurred, the vehicle stability, and whether the road was curved or not. In a model containing cars, trucks, vans, and sport-utility vehicles, using variables describing roadway, driver and vehicle characteristics, the three most powerful variables in determining rollover likelihood were: rural road location, vehicle stability measure (whether static or dynamic), and a curved road. The vehicle stability measures used were tilt table ratio (a static measure) and critical sliding velocity (a dynamic measure).

## ROLLOVER PREVENTION PROGRAMS

Mr. CARR. Now that a year has passed since the development of NHTSA's rollover prevention program, please provide an update on where you stand in your overall approach to addressing driver, driving environment and road conditions, and vehicle design factors that affect rollover crashes.

[The information follows:]

On September 23, 1992 the agency released the "Planning Document for Rollover Prevention and Injury Mitigation." Its availability was announced in the *Federal Register* September 29, 1992 (57 FR 44721). The agency announced its intention to pursue rulemaking in seven areas and presented a schedule of actions. These areas are listed below along with the action and date announced in the Planning Document, and the current status of the rulemaking:

| Alternative | Action/date in planning document | Status |
|---|---|---|
| Crash avoidance, stability requirement | Regulatory decision by Winter 1992–93. | Publication of NPRM expected in April 1994 |
| Crash avoidance, ABS requirements | Regulatory decision by Fall 1993. | ANPRM published Jan. 4, 1994 |
| Crashworthiness, interior padding | NPRM by Jan. 31, 1993 ... | NPRM published Feb. 8, 1993 |
| Crashworthiness, improved roof crush | Regulatory decision by Spring 1994. | On schedule |
| Crashworthiness, side window glazing | Regulatory decision by Fall 1993. | Decision to continue research for 1996 NPRM |
| Crashworthiness, improved door latches | Regulatory decision by early 1994. | Regulatory decision by Summer 1994 |
| Consumer Information | Continuous | "Vince and Larry^SM" advertisements on belt use and rollovers available March 1994. |

## ROLLOVER RULEMAKING SCHEDULE

Mr. CARR. ISTEA suggests but does not mandate that the agency issue a final rule(s) dealing with rollover propensity. What is your current schedule for issuing proposed rules addressing vehicle stability and consumer information pertaining to rollovers?

[The information follows:]

The agency anticipates a Notice of Proposed Rulemaking concerning Rollover Stability will be published in April 1994. "Vince and Larry^SM" public service advertisement concerning the benefits of seat belt use in rollover crashes have been produced for television and radio. The television and radio spots were made available to stations in March 1994.

## 5 MPH BUMPER STANDARD

Mr. CARR. Senator John Danforth has introduced legislation to require NHTSA to reinstate the 5 mph bumper standard, which was lowered in 1982 to a 2.5 mph standard for front and rear bumpers.

Does NHTSA have a position on this legislation?

[The information follows:]

The Department is currently formulating its views on S. 1848, a bill requiring a 5-mph bumper standard for passenger cars and minivans and the disclosure of the bumper impact capability of such vehicles. NHTSA will provide you with the agency's views on S. 1848 when the Department's position on this legislation is determined.

Mr. CARR. What research and analysis has NHTSA conducted on the relative effectiveness of 5 mph and 2.5 mph bumpers, and what would be the safety benefits of increasing the bumper standard?

[The information follows:]

In 1987 the agency evaluated the lowering of the bumper standard from 5 mph to 2.5 mph. It was based on a number of actual teardown studies of bumpers in production after the standard was lowered, analysis of 1981–84 insurance claims and a nationwide household survey of unreported collisions. It looked at about 60 car models for each of the four model years from 1981 through 1984. That study generally confirmed the estimates of an earlier regulatory analysis in 1982 (weights and costs were reduced for the 2.5 mph bumpers, claim frequency increased, but the cost per claim decreased). The difference in overall cost was small and not statistically significant but favored the 2.5 mph bumpers over the 5 mph phase II bumpers. The net effect over a car's 10 year life is a small increase in repair cost, which is offset by a reduction in both the original purchase cost and operating cost from the additional fuel consumed to carry the added weight over the life of the vehicle for a net savings to consumers.

The change in the bumper standard had no effect on the protection of safety related parts, therefore we do not see any safety benefit to increasing the bumper standard.

## LOWER BUMPER STANDARD BENEFITS

Mr. CARR. Some proponents of a 5 mph bumper standard argue that NHTSA was wrong in 1982 when the agency maintained that lower bumper standards would lead to lighter vehicles and, therefore, would save fuel and lead to net cost savings for the consumer. Would you comment?

[The information follows:]

In 1987 the agency evaluated the lowering of the bumper standard from 5 mph to 2.5 mph. It included actual teardown studies of bumpers of 60 models in production after the standard was lowered. Those studies confirmed the estimates of an earlier regulatory analysis in 1982, bumpers that were changed after the standard was modified weighed 12 pounds less than 1981/82 models. The bumper weight reduction was estimated to save $21 (1984 dollars) in fuel over the car's life.

## IIHS STUDY OF MINIVAN BUMPER PROTECTION

Mr. CARR. The Insurance Institute of Highway Safety—IIHS—has issued its own analyses of minivan bumper protection by crash testing seven minivans at 5 mph using several tests: a front and rear crash into a stationary barrier, a front angle crash into a stationary barrier, and rear crash into a pole test.

The IIHS found that the damage repair costs sustained in these crashes ranged from $3,179 to zero. Have you looked at its study? How representative of actual bumper accidents are their tests?

[The information follows:]

The agency has looked at the IIHS Status Report of January 8, 1994 which presented the results of IIHS's bumper tests on minivans. They showed high levels of damage to most of these vehicles.

The IIHS bumper tests are more severe than the tests for the 5 mph phase II standard that was in effect in 1980. IIHS's tests include a corner impact test at a speed higher than required, and a rear pole test that is not required, nor has ever been required, under the agency's regulations. IIHS amplifies the damage estimates by adding the cost from their four bumper strikes to each vehicle. As a result, the damage estimates for the seven minivans tested ranged from $1,862 to $7,643.

Beginning in 1982, the agency attempted to develop a bumper rating system. The agency conducted bumper studies between 1985 and 1987, to support development of an effective consumer information program on the damageability of new car bumper systems to provide consumers with comparative bumper cost information that could be used in making new vehicle purchasing decisions. The studies failed to show any consistent, positive correlation between damage induced by laboratory bumper tests and insurance accident repair costs. The agency stated that it was unable to develop a bumper rating methodology that correlates with real-world, low-speed crashes and that the agency did not believe it was appropriate to use scarce resources to proceed.

## 2.5 MPH BUMPER TESTS

Mr. Carr. What tests does NHTSA use for the 2.5 mph bumper standard?

[The information follows:]

The agency tests vehicles for compliance with Regulation Part 581, Bumper Standard, using a laboratory test procedure originally written for the 5 mph requirement and amended in 1990 for the 2.5 mph requirement. Each test vehicle's bumpers are impacted with a pendulum device that weighs the same as the test vehicle, followed by impacts with a fixed collision barrier.

## MINIVANS LACKING 2.5 MPH BUMPER LAW

Mr. Carr. NHTSA's 2.5 mph passenger car bumper standard does not apply to minivans. What is the reason for this and should bumper standards be extended to passenger vans?

[The information follows:]

Title I of the Motor Vehicle Information and Cost Savings Act requires bumper standards for passenger motor vehicles, but allows multipassenger vehicles to be exempted. Minivans are a subcategory within the general classification of multipurpose passenger vehicles.

Minivans were virtually unknown when the bumper standard was last revised. Additionally, some minivans are equipped with off-road features or are used for commercial applications where bumper height requirements would interfere with this capability. For these reasons, minivans were not included in the original standard.

However, minivans are now a significant part of the light duty fleet and most of them are used in the same manner as passenger cars. Thus, the agency will review its original decision to exclude minivans from the bumper standard.

## STATE PASSAGE OF BUMPER LAWS

Mr. Carr. California, Hawaii and New York now have bumper disclosure laws that require automobile manufacturers to disclose information about bumper performance. Should other states have such laws and, if so, why?

[The information follows:]

NHTSA is reviewing this matter in the context of formulating its views on S. 1848, a bill that would mandate Federal regulations requiring the motor vehicle manufacturers to disclose the bumper impact capability of passenger cars and minivans. NHTSA will provide you with the agency's views on bumper information when this review has been completed.

## DAYTIME RUNNING LIGHTS USE BY MANUFACTURERS

Mr. CARR. Last year, NHTSA finalized rulemaking to permit automobile manufacturers to equip vehicles with daytime running lights as standard equipment. General Motors has announced that it will begin installing this safety system on its cars and trucks to improve the visibility of vehicles in all weather conditions.

Have any other automobile manufacturers followed suit?

[The information follows:]

No manufacturer has followed the General Motors lead and installed daytime running lights as standard equipment on its cars and trucks.

## DAYTIME RUNNING LIGHTS RESEARCH

Mr. CARR. Some experts have estimated that the use of daytime running lights in this country could reduce the highway accident rate from 7 percent to 32 percent for both head-on and side impact collisions. Last year, however, NHTSA testified that there is no reliable study that has demonstrated that operating with lights on during the daylight in the U.S. would provide safety benefits. Isn't this issue worthy of further study? Has NHSTA undertaken any further research?

[The information follows:]

The studies that have been conducted to date on daytime running lights (DRL) effectiveness have been inconclusive. In 1990, Canada required all new cars sold in Canada to be equipped with DRLs. Subsequently, the Canadians initiated a study to track DRL effectiveness on these vehicles. As the results of this work become available, the agency will review them to assess their relevance to the U.S. environment. Separately, the agency is currently studying the possibility that DRL glare might mask the visibility of turn signals. This study is scheduled for release in the summer of 1994.

## REAR/DOOR EJECTIONS ANALYSIS

Mr. CARR. Last Friday, Secretary Peña issued a consumer advisory warning owners of minivans and other vehicles with hatchbacks that these doors can open unexpectedly in a crash, ejecting the vehicle's passengers. This warning was based on the results of a recent NHTSA analysis of occupant ejections in vehicles equipped with hatchbacks or rear doors. What have you learned thus far about the nature and magnitude of accidents involving rear window and door ejections?

[The information follows:]

Based on the 1988–1992 National Accident Sampling System data, the agency conducted a study on occupant ejections through rear doors including rear hatches, tailgates and other back doors except pickup rear doors. The results show that approximately 7,000 fatalities were associated with complete ejections each year in all light vehicles. Among these 7,000 fatal complete ejections, approximately 2,220 occurred from vehicles equipped with a rear door. It also is estimated that only 147 fatalities were associated with rear door ejections, and the vast majority of the victims were unbelted occupants.

The accident data also show that in towaway crashes of vehicles with rear doors, 3.4 percent of the rear doors popped open. This 3.4 percent door opening rate is higher than the 2.0 percent for front side doors and 0.9–1.5 percent for the rear side doors. Approximately 71 percent of the failures reported for rear door openings was damage to the latch/striker system. Over 42 percent of rear door openings occurred in rollovers.

We have asked for public comments on our analysis and these are due by March 28, 1994.

With respect to the issue of rear window ejections, the agency's research is underway to improve glazing designs to reduce occupant ejections through all windows. Although the agency has not estimated the number of ejections that occur though rear windows, it believes that these windows represent a relatively small portion of the occupant ejection problem.

### REAR HATCH VS. FRONT/SIDE DOOR EJECTIONS

Mr. CARR. The Secretary's press release indicates that an estimated 1.4 percent of occupants in accidents in which an opened rear hatch were completely ejected through the rear hatch. How does this proportion compare with the incidence of occupant ejections through front or side doors? Is there a problem unique to the design or location of the rear doors?

[The information follows:]

Based on the 1988–1992 National Accident Sampling System towaway crashes, approximately 1.4 percent of occupants in light passenger vehicles with opened rear doors were completely ejected through the rear door opening. However, this ejection rate is much lower than the 11.1 percent for the left-front side door, 5.3 percent for the right-front side door, and 1.6 to 3.9 percent for the rear side door. It appears that the ejection rate is highly dependent on the occupancy rate of the nearby seating position. Therefore, the location of the door is considered an important issue.

### FMVSS FOR REAR DOORS/LATCHES

Mr. CARR. Does NHTSA have a safety standard governing rear doors and latches? Did the vehicles involved in these accidents meet those standards?

[The information follows:]

Federal Motor Vehicle Safety Standard No. 206 "Door Locks and Door Retention Components" went into effect for passenger cars in 1968 and for trucks and multipurpose passenger vehicles in 1972. However, the standard applies only to side door latches and hinges. At present, the agency does not have a standard for rear door latches and hinges. The agency does not know whether production rear door latches and hinges currently meet the requirements specified in the current standard.

### EJECTION PREVENTION MEASURES

Mr. CARR. Previous NHTSA research has indicated that seat belts are 75 percent effective in preventing ejection and that more than 95 percent of the people killed in ejections from hatchbacks and other rear doors were not using a seat belt? What other measures are you looking at to prevent similar accidents?

[The information follows:]

While the seat belt and seatback provide the first line of protection from being ejected through the hatchback and other rear doors, other ejection prevention measures also are available. Research is underway to improve door latch integrity to minimize the probability of door opening during a crash. Also, research is underway to improve glazing designs to minimize ejections through the glazing openings and to reduce head and facial injuries by glazing contacts.

Motorists also need to be constantly reminded that allowing children or adults to sit in the rear cargo area of station wagons, hatchbacks, vans or pickup trucks is unsafe.

### GM C/K PICKUP RECALL DECISION

Mr. CARR. A little more than a year ago, NHTSA announced that it would ask General Motors to voluntarily recall several million C/K pickup trucks for safety-related defects. I understand that the NHTSA Administrator-designate, Dr. Martinez, has recused himself from this issue and that you, the deputy administrator will be the primary decision maker as to whether there should be a mandatory recall. I presume that you will make this decision in consultation with Secretary Peña. Can you tell me where you stand in your decision-making process and when you expect to make a decision on this matter?

[The information follows:]

The investigation is continuing. Activities include requesting and reviewing information from General Motors (GM) and case review of real-world crashes involving GM full-sized trucks with fuel tanks mounted outside the frame rails. If NHTSA's investigation does not indicate the presence of a safety-related defect, the investigation will be closed. If, at the completion of the investigation, the agency initially determines that the trucks contain a safety defect, NHTSA will hold a public meeting to provide an opportunity for GM and other interested parties to present data and arguments as to why the trucks should or should not be recalled. After careful consideration of all the information presented at the public meeting, as well as other facts, the agency would either close the investigation or other the manufacturer to conduct a recall. No time frame has been established for making either decision.

## STATE AND COMMUNITY GRANTS

Mr. PRICE. On page 8 of your written testimony, you state you asked for $123 million for the Section 402 State and Community Grants. Why did you not ask for full funding for the 402 program, i.e. the $142 million in ISTEA, while you asked for full funding for other programs including the Motor Carrier Safety Assistance Program? Shouldn't you have asked for full funding in view of the impressive cost benefit ratio for the 402 program?

[The information follows:]

The agency is requesting $123 million for FY 1995, the same level enacted for FY 1994, and this amount of funding will permit NHTSA to meet its highway safety goals. The Section 402 program does have an impressive cost benefit ratio. State highway safety programs implemented with Section 402 grants have saved many lives, avoided or reduced the severity of many injuries, and spared society the resultant suffering and costs. However, while the nation would benefit from a larger Section 402 program, the decision to request level funding in this program for FY 1995 was made due to other national interests—the strong desire of Congress and the Administration to hold down spending and reduce the deficit. At the $123 million program level, without earmarking, states will be able to continue support for their most effective highway safety programs.

## NORTH CAROLINA BELT PROGRAM

Mr. PRICE. You first mention on page 4 of your written testimony the tremendous benefits to society that result from increasing the number of people wearing seat belts. What are you doing to encourage other States to use the valuable lessons North Carolina has learned about seat belt use in the Click It or Ticket program that has put my home State in the top three for seat belt compliance?

[The information follows:]

NHTSA is conducting five demonstration programs to show that the periodic highly publicized enforcement approach used in North Carolina can be effective in other states.

In addition, NHTSA is urging states to participate in a two-year national campaign to achieve the Secretary's goals of increasing national seat belt usage to 75 percent and reducing alcohol-related fatalities to 43 percent by the end of 1996. This campaign, scheduled to begin with the first quarter of FY 1995, will incorporate three strategic features. First, NHTSA will implement a quarterly schedule for program material dissemination and emphasis, one that should result in a more coordinated national traffic safety agenda. Next, NHTSA will urge states and communities to conduct periodic, highly publicized enforcement efforts, such as those used in North Carolina. Finally, NHTSA will urge implementation of combined programs to enhance efficiency and impact, such as media and enforcement efforts that address both impaired driving and seat belt usage.

## STATES NOT APPLYING FOR SECTION 153 INCENTIVE PROGRAM

Mr. PRICE. You address efforts to encourage States to enact helmet laws for motorcycle riders on page 15 of your written testimony. I want to follow up on a question I asked last year about the seat belt/motorcycle helmet incentive grant program.

Did any State decide not to apply for a Section 153 grant to avoid reducing the Federal highway allocation under ISTEA?

[The information follows:]

Since the inception of the Section 153 program in fiscal year 1992, Florida has been the only State that has annually refused to participate in the Section 153 grant program because of the minimum allocation provision. Arkansas, Missouri, and Tennessee have limited their participation by only accepting a portion of the grant funds that were available to them because of their minimum allocation status. For fiscal year 1994, it is too early to determine the impact of this provision. The eligible Section 153 States which are also minimum allocation States have not yet applied or indicted their intent to apply for the incentive program.

## REDUCING PEDESTRIAN/BICYCLIST CRASHES

Mr. PRICE. On page 15 of your written testimony, you note about 7,000 pedestrians and bicyclists die each year in traffic accidents. Can you bring me up to date on the effectiveness of programs designed to lower the number of pedestrians and bicyclists dying in accidents involving motor vehicles?

[The information follows:]

In 1992, 5,546 pedestrians and 722 bicyclists died in motor vehicle crashes. These numbers represent a 29 percent decrease for pedestrians and a 23 percent decrease for bicyclists since 1981.

Although it is not possible to attribute these reductions in pedestrian and bicycle fatalities to any single factor or combination of factors, several safety products have been developed by the agency and provided to state and local safety program planners in recent years. They have been used on a wide scale and have probably contributed to the observed reduction.

One product is the "Walking Through the Years" program, which was developed to address the issues of elderly pedestrians. In addition to normal distribution through state highway safety offices, NHTSA joined forces with the American Automobile Association (AAA) to market over 80,000 copies to safety planners through AAA's local chapters.

The "Willy Whistle" series has been distributed to state and local program planners for several years. This product has demonstrated its effectiveness in reducing dart-out crashes involving young children. Willy Whistle teaches children ages 3–10 the basic concepts of pedestrian safety, such as stopping at a curb; looking left, right, then left again before entering the street; and never chasing a ball into the street.

The "Olympic Team Bicycle Safety Program" is a more recent program distributed by NHTSA. This series of products (poster, video, brochure) details proper riding behaviors for bicyclists, especially when riding near motor vehicle traffic. It includes conspicuity (being seen by traffic) and the importance of wearing an approved bicycle helmet.

"Ten Smart Routes to Bicycle Safety" is an information brochure that discusses safe bicycle practices and is designed to be a "hang tag" attached to the bicycle at the point-of-sale. Many dealers and one large manufacturer are making use of this tag.

Programs and products such as these are representative of the types of resources developed by NHTSA and distributed to state and local program officials and bicycle advocacy groups. This helps groups keep pedestrian and bicycle safety principles before the public. NHTSA's products have been designed to address specific pedestrian and bicycle problems, and constitute part of the agency's ongoing problem identification and countermeasure development research program.

## ACCIDENT REDUCTION FOR DRIVERS AGE 21–35

Mr. PRICE. You address the special problems older and younger drivers have on pages 15 and 16 of your written testimony. Starting with younger drivers, I see that great gains have been made in reducing the number of accidents involving drivers under 20 while drivers between 21 and 35 continue to be involved in a disproportionate share of wrecks.

What are you doing to cut the number of accidents involving this group of adult drivers? Does the fact that most of drivers between 21 and 35 are not in school or other central locations impede educational efforts?

[The information follows:]

Substantial progress also has been made in reducing traffic crashes, injuries, and fatalities among drivers aged 21 to 34. From 1982 to 1992, the number of drivers aged 21 to 34 involved in fatal crashes dropped 19%, compared to a 7% drop in all drivers involved in fatal crashes. The number of vehicle occupant fatalities per population dropped 21% for age 21–24 and 19% for age 25–34, compared to an overall 16% drop. Nevertheless, occupant fatality rates per population for persons aged 21–34 are exceeded only by the rate for persons aged 16–20.

The key issue for drivers aged 21–34 is alcohol. Thirty percent of all drivers aged 21–34 involved in fatal crashes had a BAC of .10 or above, the highest level of any age group.

Except for activities directed specifically to underage youth, virtually all NHTSA's impaired driving program affects and influences drivers in this age group. Improved laws, well-publicized enforcement, and effective sanctions deter them from drinking and driving. Public information and education activities work to influence their attitudes and to make drinking and driving socially unacceptable.

Several activities are directed specifically towards drivers in this age group. Cooperative research with Harvard University is investigating how media can change the drinking and driving behavior of the young drivers who drink regularly at bars and taverns, one of the most difficult groups to influence. Worksite programs pick up where school programs leave off and provide both traffic safety education and policies in a structured environment. TEAM public information and facility alcohol management activities are aimed directly at 21–34 year old males through their interest in college and professional sporting events.

## IVHS PROGRAM—OLDER DRIVER INITIATIVES

Mr. PRICE. Turning to the challenges older drivers face, how effective is the IVHS program directed at this group?

[The information follows:]

IVHS crash avoidance countermeasures will argument driver perception of crash hazards and assist their decision-making in complex situations such as intersections. Under some circumstances, they may even assume partial control of the vehicle, as in the case of automatic soft braking in response to a collision threat. These devices have the potential to help older driers, may have difficulty perceiving threats, making decisions, and executing driver control responses. However, limitations associated with aging may make it difficult for older drivers to use IVHS devices successfully. This can also be a possibility for the entire driving population. For example, additional devices in the vehicle may distract and disrupt the driving performance of older persons.

Accordingly, agency IVHS and older driver research will address the important question of how IVHS devices will impact positively or negatively, the safety of older drivers.

## HOUSTON METRO—HOV LANE PROBLEMS

Mr. DELAY. Houston's Regional Bus Plan, which I fully support, is essentially a very efficient bus system that functions like most other city's like most other city's light rail programs. We have a series of connecting hubs—park and ride facility which connects directly to express bus service which carries people to and from work in the Houston area.

The system is dependent upon a very extensive network of HOV lanes. Many of these lanes run adjacent to freeways.

Over the past year, tragedy has struck this system of HOV lanes. Last year, 54 motorists entered the HOV lanes in the Houston areas in the wrong direction. Unfortunately, two of those incidence ended in head-on collisions and two people died. Earlier this year, a third motorist died in a head-on collision after entering the HOV lane in the wrong direction.

All of the incidents have occurred in off-peak hours. Houston METRO is now limiting hours of operation to HOV lanes in response to the safety program.

Can you give me an idea of the accident rate in HOV lanes in the United State as a result of cars entering and driving the wrong direction? Is this unusual to have this problem?

[The information follows:]

Data are somewhat limited on nationwide high-occupancy vehicle (HOV) lane accident rates. Several states have studied accident experience, however, in conjunction with improved efforts to enforce the occupancy requirements (HOV–2, HOV–3, etc). These studies generally concluded that HOV land accident rates were lower than the rates reported on the parallel non-HOV lanes. This can be contributed to the more uniform traffic flow in the HOV lanes and lack of start-and-stop operation. Barrier-separated from the regular traffic and access is limited to a few well-defined locations.

With regard to whether wrong-way movements on HOV lanes are a common problem, information suggests this is not the case. HOV lanes are normally safer than the general-purpose lanes. In an effort to explore this, a research project is planned for FY 1995 to study the safety aspects of HOV lanes.

Mr. DELAY. How would NHTSA respond to the fact that taxpayers funded the HOV lanes and their hours of operation should be maximized—24 hours one direction or the other.

[The information follows:]

The method of operating HOV lanes is a local decision based on local traffic conditions, enforcement capabilities, transit operations and facilities, and other considerations. In some urban areas, HOV lanes are operated such that users must meet the minimum occupancy restrictions (HOV–2, HOV–3, etc) on a 24-hour basis. Others require meeting these requirements during the peak traffic hours, such as 6AM–9PM and 4PM–7PM, and during off-peak times motorists can use the lanes regardless of the number of people in their vehicle. Another option is to close the HOV lanes during off-peak times, when their extra capacity is not needed. Pavement usage is not a significant factor during the off-peak times because there would be ample vehicle capacity in the general purpose lanes.

Mr. DELAY. What can be done to further reduce the risk of entering the HOV in the wrong direction?

[The information follows:]

Safety of the HOV lane users is of paramount importance to agencies responsible for their operation. Generally HOV lanes are safer than the adjacent general-purpose lanes. Some of the techniques that can be used to discourage and detect wrong-way movements are: automatic or manually operated gates used to close off the entrances and exits; manually operated and/or electronic changeable-message signs to indicate whether lanes are open or closed; traffic and/or lane control signals to indicate open or closed lanes; closed circuit TV to monitor lanes; detectors that advise operators of wrong way movements; pavement markings to reinforce sign messages; moveable barriers to open and close lanes; police officers stationed so as to control entrances and exits to the lanes; and lane closures during off-peak times.

## TEAM—TECHNIQUES FOR EFFECTIVE ALCOHOL MANAGEMENT

Mr. DELAY. Last year, I asked questions regarding "Party Smart" which is a major national consumer alcohol awareness and education program sponsored by Beer Drinkers of America. I continue to follow their efforts because they are entirely underwritten by our private, nonprofit organization at absolutely no cost to the taxpayers.

As you may know, one of their more important programs is their Designated Driver and Fan Alcohol Awareness Program. Through this program, and working with community volunteers, they operate fan oriented designated driver and stadium alcohol awareness programs at a number of professional sports venues at no profit to Beer Drinkers of America and at a minimal costs to the pro sports teams that adopt it.

Their program has been met with a great deal of success. In fact it has been so successful that there are other organizations that have copied the idea much to the delight of Beer Drinkers of America.

Last year during this exercise, I questioned NHTSA's intentions regarding the suppression of the Party Smart campaign by favoring the government's taxpayer funded version of the same idea, TEAM. It is my understanding that groups trying to accomplish the same objectives as TEAM are being shut out of the meeting and planning process.

Would you care to comment on your involvement with outside groups that are not taxpayer funded and accomplish the same goals?

[The information follows:]

TEAM's facility alcohol management program is unique. It provides facilities with a framework for defining their own comprehensive facility alcohol management policies and program, incorporating parking lot attendants, ticket sales and admission staff, ushers, security, and vendors. It also assists facilities in training their staff in these policies and practices.

A number of other programs sponsored or funded by other groups address individual elements in TEAM's comprehensive facility alcohol management package. Examples include server training and designated driver programs. TEAM facilities frequently include these activities as part of their comprehensive TEAM program. TEAM encourages these relationships to be worked out by individual facilities.

## TEAM PROGRAM BUDGET

Mr. DELAY. How much is budgeted for this program this year?

[The information follows:]

For fiscal year 1995, $440,000 is budgeted for the TEAM program.

## TEAM PROGRAM—ADDITIONAL PLANNING GROUPS

Mr. DELAY. What can be done to facilitate the inclusion of groups that are interested in accomplishing the same objectives in the planning process?

[The information follows:]

Facilities participating in the TEAM program are encouraged to use server training, designated driver, and alcohol awareness programs sponsored by other groups in order to complement their comprehensive TEAM Facility Alcohol Management program. Venue planning for programs and activities should include resources from other groups, as long as certain minimal guidelines are met in order to avoid confusing TEAM with the other programs.

### TEAM PROGRAM—DESIGNATED DRIVER PROGRAM

Mr. DELAY. Last year, it was suggested that the scope of TEAM's designated driver program was "limited at best." Would you care to comment on any improvements that have been made to make the program more effective?

[The information follows:]

A designated driver program (TEAM or other version) is limited in that it cannot be expected to be a cure-all for impaired driving, whether for a facility or for society in general. TEAM's designated driver program is fully developed and can be used by any facility as part of its comprehensive facility alcohol management program. But it cannot be the sole element of an effective facility alcohol management program.

### NISSAN RECALL—RADIATOR FAN COOLING SYSTEM

Mrs. BENTLEY. During the second fire-related recall on the Nissan vans, announced in 1990, Nissan installed a radiator sub-reservoir tank in the cooling system that subsequently created safety problems. Nissan also changed the radiator fan coupling with one that continued to operate at higher engine speeds. Doesn't such operation of the fan at higher engine speeds increase the stress on the drive belt.

[The information follows:]

The fan coupler installed during the second Nissan van recall increased the engine speed for disengagement of the fan from 3,250 revolutions per minute (rpm) to 3,750 rpm. This 500 rpm increase in fan speed would add marginal additional stress on the drive belt.

### NISSAN RECALL—NHTSA OVERSIGHT

Mrs. BENTLEY. Nissan agreed to perform the second fire-related recall before submitting the information that NHTSA had requested the manufacturer to provide, and as a result, NHTSA did not obtain the information it has requested in 1990. Would obtaining that information have possibly helped NHTSA determine that Nissan's proposed fix at that time would not be adequate?

[The information follows:]

No. The second recall of 1987–1990 Nissan for engine compartment fires was due to power steering hose failures. Subsequent engine compartment fires in these vans were due to engine coolant losses.

### NISSAN RECALL—COMPONENT FAILURES/OVERHEATING

Mrs. BENTLEY. Last year, before the fourth fire-related recall on these vans, NHTSA asked Nissan to provide information related to component failures and overheating. In response, Nissan reported about 22,000 water pump replacements on the 33,000 vans sold and that in addition to 156 engine compartment fires, it was aware of 748 reports of overheating conditions that did not result in fires. Howe does NHTSA use such information to determine when problems are sufficient to require recalls and what components are defective? Why didn't NHTSA investigate and resolve these problems sooner?

[The information follows:]

The agency assesses that risk to motor vehicle safety posed by a potential safety defect by analyzing a variety of issues, including frequency of occurrence and potential safety consequences.

The agency's involvement in investigation engine compartment fires in 1987–1990 Nissan vans has been timely and thorough. The first recall was initiated by Nissan before NHTSA was aware of any consumer complaints. Based on three reported engine compartment fires after the first recall, NHTSA initiated an investigation that resulted in the second recall. After receipt of three complaints of engine fires in vehicles which appeared to have all prior recall work performed, NHTSA initiated another investigation of the allegations made in a recall petition on the adequacy of the Nissan engine compartment recall remedies filed on January 25, 1993. That action resulted in the fourth recall. Finally, the agency's actions in the Nissan decision to repurchase the 1987–1990 Nissan vans came as a result of NHTSA investigative activities. In each case, the agency acted as soon as information was available that suggested that a problem existed.

### NISSAN RECALL—NHTSA AUDIT RESULTS

Mrs. BENTLEY. When the fourth recall was announced on May 4, 1993, NHTSA promised to monitor the recall closely and conduct a formal audit "in the fall". What were the results of this audit?

[The information follows:]

The audit surveyed Nissan van owners approximately one month after notification of the availability of the recall remedy by Nissan. The intent of the survey was to contract owners of vans which has been remedied to obtain information on the performance of the recall. If the van had not yet been remedied, the survey would provide information on why the work has not been done and provide encouragement to owners to have the recall work completed as soon as possible. NHTSA has received 5,874 responses to the survey. The survey provided a limited amount of information which the agency used in its investigative activities in late 1993, which led to Nissan's repurchasement program. The survey also indicated that many owners were happy with their vans, Nissan and its dealers, and the remedy work.

### NISSAN RECALL—BATTERY BOX INSPECTIONS

Mrs. BENTLEY. In one survey of the battery box wiring harness modifications performed as part of Nassan's fourth van recall, inspectors found that the work was not properly performed on 25 of the 26 vehicles studied. How do these results compare to those of other Nissan van inspections and to inspections of recalled vehicles of other manufacturers?

[The information follows:]

The field inspection of Nissan vans was initiated based on concerns about the installation of the battery box wiring harness in a Nissan van which has been involved in a fire shortly after the fourth recall work was completed. Further investigation of that vehicle was unable to substantiate that the battery box wiring was the cause of the fire. However, inspection of the battery box wiring of Nissan vans at locations around the country revealed the difficulty dealers were having in installing the recall wiring harness according to Nissan instructions. If not installed correctly, it is NHTSA's opinion that the wiring could chafe and short, possibly causing a vehicle fire. This finding prompted the Nissan repurchasement program.

It is not possible to compare the results of the Nissan van inspections with inspections of other vehicles for other purposes.

### NISSAN RECALL—NHTSA PUBLIC HEARINGS

Mrs. BENTLEY. In January 1993, NHTSA received a petition requesting a public hearing to discuss engine compartment fires in Nissan vans. How often has NHTSA received such requests for public hearings to discuss specific alleged safety defects?

[The information follows:]

NHTSA maintains a petition database according to the type of petition received—a petition for a defect investigation or a petition concerning the adequacy of a recall notification or remedy. The database does not track the number of petitions that specifically ask for a public hearing.

It is noted the 49 CFR Part 557.6 requires the Administrator of NHTSA to consider a number of factors in determining whether to hold a public hearing as the result of a petition. One of the factors is the "ability of the NHTSA to solve the problem without holding a hearing."

Mrs. BENTLEY. How often has NHTSA granted such requests?

[The information follows:]

NHTSA's petition database does not track the number of petitions that specifically ask for a public hearing. Accordingly, the agency does not track requests granted.

Mrs. BENTLEY. Why was this request on Nissan vans denied?

[The information follows:]

The petition concerned the adequacy of the Nissan van recalls. After conducting a preliminary investigation of the facts, and reviewing the fourth recall remedy proposed by Nissan, NHTSA did not believe a public hearing would provide any new information that would change the agency's decision to accept the recall remedy.

Mrs. BENTLEY. Was there any type of agreement or understanding between NHTSA and Nissan representatives to the effect that if Nissan recalled the vehicles again, NHTSA would delay or deny a public hearing at that time?

[The information follows:]

The initiation of the fourth recall by Nissan resulted in a denial of the petition to hold a public hearing on the adequacy of the previous recalls. However, NHTSA clearly stated that it would monitor the recall closely and conduct a formal audit of the recall in fall 1993. If the audit, or any other information, indicated that the safety defect was not being remedied, the agency would not hold a public hearing to determine what enforcement actions should be taken. Those are precisely the steps that were underway and that led to the Nissan repurchasement program.

Mrs. BENTLEY. Wouldn't a public hearing possibly help NHTSA obtain additional information on which to determine the need for or the scope of a possible recall or other action?

[The information follows:]

Not in our opinion, since the agency already had sufficient information from consumers and Nissan in order to make informed decisions about the need for, or scope of, a safety recall.

Mrs. BENTLEY. Wouldn't a public hearing help focus public attention on the safety problems of specific vehicles and generate a higher recall rate than would otherwise be expected, thus improving the safety of those vehicles on the road?

The information follows:]

The completion rate on the Nissan vans has been very high, averaging 90 percent for the completed recalls. The effectiveness of a public hearing to focus further attention on the matter in an effort to improve the response rate for the Nissan van recalls would be questionable. The non-responding portion of Nissan vans is believed to consist primarily of scrapped or out-of-service vans.

### NISSAN RECALL—VANS REPAIRED

Mrs. BENTLEY. How many of the vans (a) have been repaired in each of the recalls, and (b) have been neither repaired under the fourth recall or repurchased by Nissan?

[The information follows:]

According to the latest figures received from Nissan through February 1994, the Nissan van recalls have the following completion rates:

| Recall | Vans involved | Vans remedied | Completion rate (percent) |
|---|---|---|---|
| 87V–109 | 10,120 | 9,447 | 93 |
| 90V–136 | 33,314 | 30,919 | 93 |
| 91V–211 | 33,314 | 28,844 | 86 |
| 93V–036 | 33,314 | 23,798 | [1] 71 |

[1] This rate will increase as the recall is ongoing and the rate reflects only 5 months of recall activity.

Approximately 9,500 vans have not remedied or repurchased under the fourth recall. However, this includes those vans which have been scrapped, stolen, or otherwise removed from public use on the highways.

## NISSAN RECALL—CONFLICT OF INTEREST QUESTIONED

Mrs. BENTLEY. Erika Jones, former Chief Counsel at NHTSA, has met with NHTSA officials on Nissan's behalf to discuss the problems with these vans. Do you see this type of involvement by a former official as a conflict of interest? Does such involvement have any potential effect on NHTSA's efforts to identify problem vehicles and obtain manufacturer cooperation in getting the vehicles repaired or removed from the roads?

The information follows:]

We do not believe that Ms. Jones' contacts with NHTSA regarding the problems with Nissan vans create any conflict of interest. Ms. Jones left NHTSA in May of 1989. Pursuant to 18 U.S.C. Section 207, she was precluded from representing anyone before NHTSA or the Department of Transportation for a period of one year from that date. We believe that she complied with that requirement. Since 1990, she has represented several different clients before NHTSA involving matters in which she did not participate personally or substantially while she was with the agency and matters that were not pending under her official responsibility during her last year with the government.

In general, involvement by former NHTSA employees in ongoing defect investigations has little or no effect on the agency's efforts to identify problem vehicles. On occasion, such involvement enhances the agency's ability to obtain manufacturer cooperation in obtaining recalls, since former employees are familiar with the agency's procedures and are often more willing to recognize the validity of the agency's position.

## NISSAN RECALL—NHTSA RESPONSE TO NISSAN OWNERS

Mrs. BENTLEY. Many owners of Nissan vans have told us that NHTSA has been simply referring them to Nissan rather than doing anything to help them or even listen to them. Does NHTSA make a written record of every complaint to its auto safety hotline, and are such records maintained in a way that facilitates sorting (such as by make, model, and type of safety problem), retrieval, and analysis?

[The information follows:]

NHTSA's toll-free Auto Safety Hotline logs every telephone call. A record of every call reporting a potential safety defect or recall problem is created and entered into the agency's automated consumer complaint system which can be easily sorted, retrieved, and analyzed by NHTSA's enforcement program staff.

Mrs. BENTLEY. How frequently does NHTSA simply refer callers to the vehicle manufacturers?

[The information follows:]

When callers have problems that the agency can assist them with, NHTSA does. If a consumer has a problem outside the authority of the agency, the consumer is referred to the manufacturer or another Federal or state agency that may be of assistance. The agency cannot interfere with disputes between consumers and manufacturers or dealers on issues of a nonsafety nature, such as warranty and dealership problems, renumeration matters, and fair trade practices.

Mrs. BENTLEY. What percentage, if any, of the calls to NHTSA's safety hotline are received by a recording device?

[The information follows:]

The majority of calls to the Auto Safety Hotline are to request motor vehicle safety literature, and such requests are typically made through the automated system. Consumer calls to the Hotline to file a safety defect or report problems with a recall are made directly to Hotline operators. If all operators are busy, callers can leave their name/telephone number and the call is returned. The majority of callers who wish to speak to a Hotline operator, are in fact able to do so without having to leave a message.

Mrs. BENTLEY. How often does NHTSA follow up on hotline contacts in order to (1) obtain additional information or (2) determine whether the safety problems were resolved?

[The information follows:]

It is not possible to quantify how many Hotline calls receive follow-up action. The decision of whether to re-contact a Hotline caller depends on many factors, including the subject, the amount of detail originally provided, and whether other contacts with the caller have already been made.

Mrs. BENTLEY. What are the results of any surveys of consumer satisfaction with NHTSA's hotline?

[The information follows:]

The most recent survey of consumer satisfaction with the Auto Safety Hotline was made in 1991. The consumers in that survey felt that the Hotline was serving their needs well.

Mrs. BENTLEY. What are your views of the success of NHTSA's hotline related activities as (1) a method of gathering information from consumers, and (2) a means for the federal government to work with consumers to remedy specific safety problems?

[The information follows:]

NHTSA relies heavily on consumer complaints about safety-related problems with motor vehicles and items of motor vehicle equipment as a means of identifying potential safety defects. The Hotline provides the agency with the ability to collect a large volume of information from consumers nationwide. As such, the Hotline is invaluable.

The Hotline also provides a means of providing consumers with information on a wide range of motor vehicle safety issues and with assistance to owners who are having safety-related problems resolved. The Privacy Act limits NHTSA's ability to provide owner's names/addresses to manufacturers, unless the consumers provide written authorization to release their names to manufacturers.

Mrs. BENTLEY. To what extent do funding limitations affect NHTSA's ability to address consumer safety problems with motor vehicles?

[The information follows:]

NHTSA believes that the current funding levels provide the agency with sufficient resources to conduct a defects investigation program that addresses the potential safety problems of vehicles on-the-road.

### NISSAN RECALL—VAN BUYBACK RESULTS

Mrs. BENTLEY. What indication does NHTSA have that Nissan's van buyback offers will be successful? What does NHTSA plan to do to ensure that the problems have been corrected on those vans not repurchased by Nissan?

[The information follows:]

Based on approximately 2,500 Nissan van owners who have already contacted Nissan and requested an expedited repurchasement prior to the official owner notification in April 1994, it would appear that a large number of the van owners will accept Nissan's offer. For those owners who wish to keep their vans, Nissan will inspect each van to ensure that all prior recall work has been completed correctly. NHTSA will monitor closely any further reports of engine compartment fires in these vehicles which might indicate a continuing defect trend.

Mrs. BENTLEY. Approximately what will the buyback cost Nissan (and compensate van owners) in 1994 and 1995, and what would that amount have been in 1990 if Nissan had done the buyback at that time rather than initiating the second of four recalls?

[The justifications follow:]

Nissan will repurchase the vans at the average retail value of all regional January 1994 NADA "Blue Book" values. Published accounts have indicated that Nissan expects the recall to cost as much as $231 million. There should not be any additional costs to Nissan in 1995 since Nissan owners have about three months (120 days) to decide on Nissan's repurchasement offer.

NHTSA does not have a basis for estimating the total cost that Nissan would have incurred if a repurchasement program had been deemed necessary in 1990, given the agency's lack of information on the administrative and associated costs of such a program.

## CLOSING REMARKS

Mr. CARR. As a final concluding comment, you do a great job and this Member has enjoyed working with you over the years on so many important issues. I look forward to working with you again and we will do the best we can by your budget. Unless there are any other questions, we will adjourn this hearing. Thank you.

Mr. HART. Thank you, Mr. Chairman. We certainly look forward to working with the Committee.

[The justifications follow:]

U.S. Department of
Transportation

# BUDGET ESTIMATES
## FISCAL YEAR 1995

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## NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

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SUBMITTED FOR USE OF
THE COMMITTEES ON APPROPRIATIONS

## NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
## FY 1995 CONGRESSIONAL BUDGET

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# INTRODUCTORY STATEMENT
# FOR THE
# FY 1995 CONGRESSIONAL BUDGET

The FY 1995 budget proposal to Congress will support further progress by the National Highway Traffic Safety Administration (NHTSA) in improving traffic safety nationally. The program proposed by the agency will focus on vehicle and occupant safety, and seek to address behavioral issues affecting the safety of drivers, passengers, and pedestrians. The 1995 program is designed to foster central crash data analysis and research underlying all areas of NHTSA program activity.

Motor vehicle crashes continue to be a leading public health problem facing the United States. Traffic crashes represent the number one cause of deaths for persons ages 5-32, and the leading cause of injury. Nationally, approximately one-half of the victims transported to trauma injury centers are injured in motor vehicle crashes. Crashes result in direct societal costs of $137.5 billion annually. Medical costs of motor vehicle injuries are over $14 billion yearly, and nearly 30 percent are paid by Medicare and Medicaid.

As enormous as the problem is, NHTSA's programs are making progress. About 70,000 lives have been saved over the past 10 years by reducing impaired driving and increasing safety belt use. This improvement also saved $50 billion in direct, out-of-pocket costs to society. The Secretary's new combined alcohol-safety belt program is designed to increase these savings. Achieving the program's goals will prevent an additional 1,200 alcohol-related deaths each year, and save an additional 1,700 lives annually through increased belt use. Success in this single Secretarial safety initiative would save society $5.8 billion in direct costs per year, including $1 billion in annual health care costs.

Although great strides have been made in highway safety, now is not the time for complacency. Preliminary data indicate that traffic deaths increased slightly in 1993, following four years of decline. This increase is a sobering reminder of the work facing NHTSA in FY 1995. Also, the rate of motor vehicle deaths per 100,000 population, the measure that indicates the relative magnitude of fatalities from a public health viewpoint, is about twice that of other industrialized countries such as the United Kingdom and the Netherlands. In addition, there is evidence that the reduction in fatalities has been translated into an increase in injuries.

The budget request for FY 1995 reflects NHTSA's vast legislative responsibilities, the implementation of effective measures to reduce deaths, and our plan to focus more time, attention and resources on reducing and preventing crash injuries. To carry out these goals, NHTSA is requesting a FY 1995 Budget of $277 million, consisting of $125.8 million for the Operations and Research Program and $151.4 million for Highway Safety Grants to the States. The budget request for FY 1995 reflects a reduction of nearly $21 million below the budget Congress enacted for FY 1994. This reflects the need to reduce Federal spending, as well as achieve the agency's goal of utilizing the funds appropriated for NHTSA more effectively and efficiently.

The FY 1995 program to be supported by the budget request is composed of a number of significant activities:

- Completion of final rulemaking actions mandated by the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), including air bags in passenger vehicles, side impact protection and antilock braking systems on large commercial trucks.
- Regulatory work on rollover protection, child safety in side impacts, upgraded frontal crash protection, and safety of electric and alternatively-fueled vehicles.
- New Car Assessment Program testing of frontal crashworthiness and side impact protection, with the goal of providing consumers with better safety information to use in making decisions about vehicle purchases.
- Conduct vehicle enforcement compliance tests in order to guarantee that the motoring public receives improved safety benefits offered by new performance standards for frontal crash and side impact protection, as well as in other areas.
- Manage an active, expanded defect investigation effort to ensure that unsafe vehicles are pinpointed, recalled and corrected. This will entail processing more defect complaints, conducting more vigorous investigations, and operating the Auto Safety Hotline to satisfy public demands for safety information (and in turn receiving more information on potential vehicle defects as the primary support to the agency's defect investigation activity).
- Progress toward achievement of the Secretary's goals to reduce alcohol-related deaths to 43 percent of total traffic deaths and increase safety belt usage to 75 percent nationally by 1997. Achieving these two goals will save nearly 2,900 lives per year and reduce U.S. health care costs by $1 billion annually.

- Conduct a broad program of technical assistance to improve State and local highway safety efforts addressed to driver impairment, occupant protection, traffic speed enforcement, emergency medical services, older and young driver safety, measures to stop high-risk behavior, and increased safety for motorcyclists, pedestrians and bicyclists.

- Continue crashworthiness research to improve frontal crash, rollover and side impact protection, and carry out major biomechanics studies of injury reduction and prevention to support NHTSA's vehicle safety rulemaking actions.

- Expand research activities on Intelligent Vehicle-Highway Systems. NHTSA will focus on improvements in vehicle crash avoidance and safety evaluation of mobility enhancements. The agency will work closely with industry to demonstrate promising system designs.

- Develop and build a world-class National Advanced Driving Simulator to improve driver and vehicle crash avoidance capabilities. The simulator will be located at the University of Iowa and will receive a major part of its financial support through non-Federal contributions.

- Manage major crash information collection and analysis systems, including the Fatal Accident Reporting System (FARS) and the National Accident Sampling System (NASS). These systems are crucial to Federal, State and private sector efforts to improve traffic safety in the U.S.

- Conduct program evaluations of vehicle standard effectiveness, implement strategic planning to guide future agency programs, and carry out studies to better understand the impact of crash injuries on normal human functions, as well as their effect on the nation's economy and health care costs.

NHTSA's Highway Traffic Safety Grant programs support state and community efforts to create and implement innovative highway safety programs. These programs, tailored to the needs of each state, reduce deaths and injuries on our highways nationwide. In FY 1995, $151.4 million from the Highway Trust Fund is requested for the following programs:

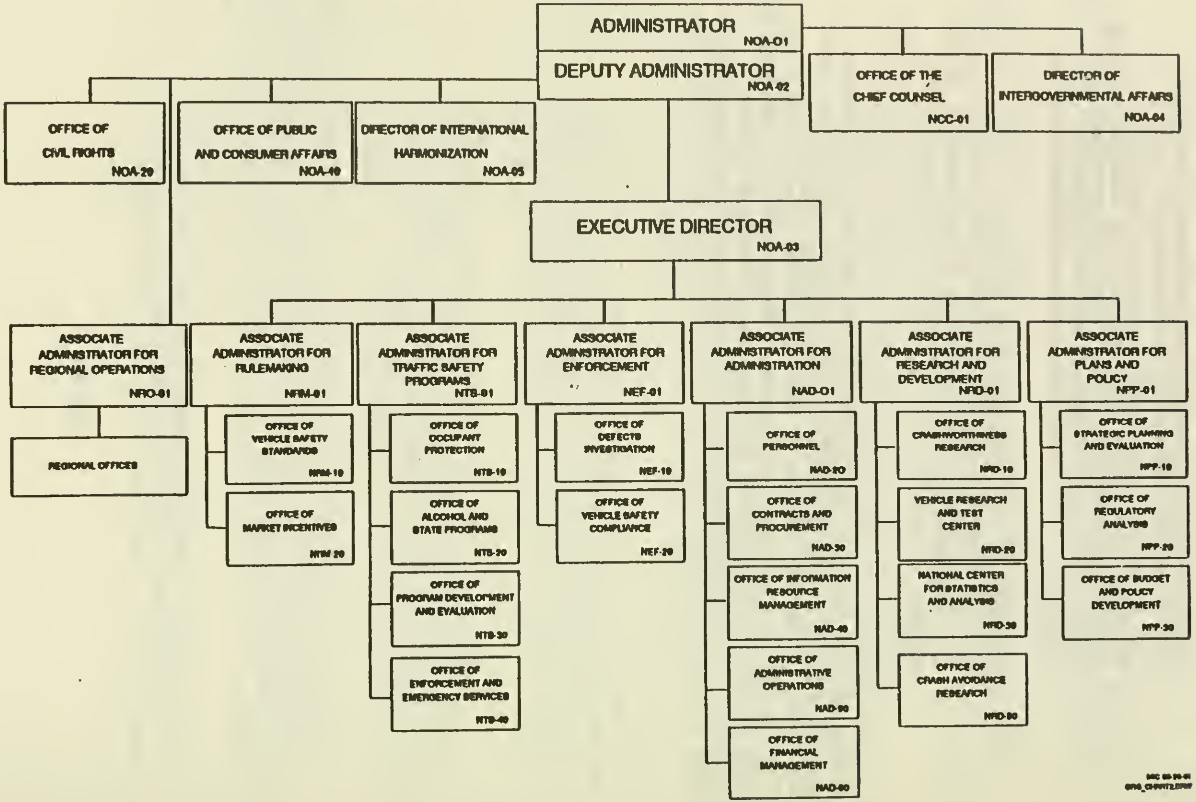
- Section 402 State and Community Grants - $123 million. This grant program provides Federal leadership, encouragement and technical assistance to all states in their efforts to develop and implement the most effective highway safety programs.

- Section 410 Alcohol-Impaired Driving Countermeasures Grants - $25 million. This grant program has been very influential in encouraging states to pass strong legislation to deal with drunk and drugged driving problems.

- National Driver Register - $3.4 million. All 50 states and the District of Columbia have been awarded grants of $100,000 each to assist them in converting to the new Problem Driver Pointer System (PDPS). NHTSA expects to have all states fully operational by April 1995.

FY 1995 funding is not requested for the Section 408 Alcohol Safety Incentive Grant program and the Section 153 Safety Belt and Motorcycle Helmet Incentive Grant program. There is no dollar authorization beyond FY 1994 for NHTSA grants under the Section 408 or Section 153 programs. The Section 408 program has been successfully replaced by the newer Section 410 Grant program. The three year Section 153 Grant program concludes in FY 1994, as the Section 153 "transfer of funds" provision goes into effect in FY 1995.

# NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION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OFFICE OF STRATEGIC PLANNING AND EVALUATION NPP-10
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## NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

### Summary of Authorizing Legislation

The National Highway Traffic Safety Administration was established as a separate organization in the Department of Transportation (DOT) in March 1970. It succeeded the National Highway Safety Bureau which had administered motor vehicle and highway safety as an organization in the Federal Highway Administration.

NHTSA's most important programs are authorized under three laws: The National Traffic and Motor Vehicle Safety Act (1966), the Highway Safety Act (1966) and the Motor Vehicle Information and Cost Savings Act (MVICS, 1972).

The Motor Vehicle Safety Act authorizes promulgation and enforcement of safety standards for vehicle and related safety equipment, supporting research including acquisition of required testing facilities, and operation of the National Driver Register (NDR). The National Driver Register Act of 1982 authorized a new, electronic service for States.

The Highway Safety Act (Title 23 USC) provides for a national highway safety program implemented through grants to the States (Section 402), and authorizes supporting research, development and demonstration programs (Section 403). Legislation in 1982 authorized alcohol incentive grants (Section 408) to States that implement certain laws and programs. The 1988 Anti-Drug Abuse Act authorized a drunk driving incentive grant program (Section 410) to encourage even stronger State impairment laws and programs.

The MVICS Act provides for the establishment of low-speed collision bumper standards, consumer information activities and odometer regulations. Amending legislation in 1975 established the Secretary's responsibility (delegated to NHTSA) for establishing automotive fuel economy standards. Legislation in 1984 authorized NHTSA to issue regulations for improving motor vehicle theft prevention.

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA/1991) represented an important milestone for NHTSA's support to State highway safety efforts. ISTEA/1991 reauthorized Section 402 State and Community Grants; continued authorization of Section 410 incentives, but in a more effective, two-tiered structure; and authorized the Section 153 safety belt and motorcycle helmet use grants.

## OPERATIONS AND RESEARCH

## LEGISLATIVE AUTHORIZATION FOR FY 1995 CONGRESSIONAL SUBMISSION

(Dollars in Thousands)

| | National Traffic and Motor Vehicle Safety Act | Motor Vehicle Information and Cost Savings Act | Anti Car Theft Act of 1992 | Drug Recognition Expert Training | Section 403 of Highway Safety Act | State Formula Grant Admin. (Highway Safety Act) | Nat'l Driver Register Admin. Expenses | Total |
|---|---|---|---|---|---|---|---|---|
| **RULEMAKING** | | | | | | | | |
| *Permanent Positions:* | | | | | | | | |
| *Vehicle Safety & Consumer Stds.* | *53* | *0* | *0* | *0* | *0* | *0* | *0* | *53* |
| *Automotive Consumer Programs* | *0* | *16* | *0* | *0* | *0* | *0* | *0* | *16* |
| *Plus: Mission Support* | *18* | *8* | *0* | *0* | *0* | *0* | *0* | *26* |
| *Total FTPs* | *71* | *24* | *0* | *0* | *0* | *0* | *0* | *95* |
| Dollars: | | | | | | | | |
| Salaries & Benefits | 5,107 | 1,726 | 0 | 0 | 0 | 0 | 0 | 6,833 |
| Travel | 44 | 16 | 0 | 0 | 0 | 0 | 0 | 60 |
| Operating Expenses | 1,210 | 409 | 0 | 0 | 0 | 0 | 0 | 1,619 |
| Contract Program: | | | | | | | | |
| Vehicle Safety & Consumer Stds. | 500 | 0 | 0 | 0 | 0 | 0 | 0 | 500 |
| NCAP | 0 | 2,460 | 0 | 0 | 0 | 0 | 0 | 2,460 |
| Fuel Economy | 0 | 785 | 0 | 0 | 0 | 0 | 0 | 785 |
| Contract Subtotal | 500 | 3,245 | 0 | 0 | 0 | 0 | 0 | 3,745 |
| Total Dollars | 6,861 | 5,396 | 0 | 0 | 0 | 0 | 0 | 12,257 |

## OPERATIONS AND RESEARCH

## LEGISLATIVE AUTHORIZATION FOR FY 1995 CONGRESSIONAL SUBMISSION

(Dollars in Thousands)

| ENFORCEMENT | National Traffic and Motor Vehicle Safety Act | Motor Vehicle Information and Cost Savings Act | Anti Car Theft Act of 1992 | Drug Recognition Expert Training | Section 403 of Highway Safety Act | State Formula Grant Admin. (Highway Safety Act) | Nat'l Driver Register Admin. Expenses | Total |
|---|---|---|---|---|---|---|---|---|
| *Permanent Positions:* | | | | | | | | |
| *Defects Investigation* | *52* | *0* | *0* | *0* | *0* | *0* | *0* | *52* |
| *Vehicle Safety Compliance* | *38* | *0* | *0* | *0* | *0* | *0* | *0* | *38* |
| *Odometer Fraud* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* |
| *Plus: Mission Support* | *6* | *0* | *0* | *0* | *0* | *0* | *0* | *6* |
| *Total FTPs* | *96* | *0* | *0* | *0* | *0* | *0* | *0* | *96* |
| Dollars: | | | | | | | | |
| Salaries & Benefits | 6,905 | 0 | 0 | 0 | 0 | 0 | 0 | 6,905 |
| Travel | 95 | 0 | 0 | 0 | 0 | 0 | 0 | 95 |
| Operating Expenses | 2,280 | 0 | 0 | 0 | 0 | 0 | 0 | 2,280 |
| Contract Program: | | | | | | | | |
| Vehicle Safety Compliance | 5,400 | 0 | 0 | 0 | 0 | 0 | 0 | 5,400 |
| Defects Investigation | 3,038 | 0 | 0 | 0 | 0 | 0 | 0 | 3,038 |
| Contract Subtotal | 8,438 | 0 | 0 | 0 | 0 | 0 | 0 | 8,438 |
| Total Dollars | 17,718 | 0 | 0 | 0 | 0 | 0 | 0 | 17,718 |

## OPERATIONS AND RESEARCH

## LEGISLATIVE AUTHORIZATION FOR FY 1995 CONGRESSIONAL SUBMISSION

(Dollars in Thousands)

| HIGHWAY SAFETY | National Traffic and Motor Vehicle Safety Act | Motor Vehicle Information and Cost Savings Act | Anti Car Theft Act of 1992 | Drug Recognition Expert Training | Section 403 of Highway Safety Act | State Formula Grant Admin. (Highway Safety Act) | Nat'l Driver Register Admin. Expenses | Total |
|---|---|---|---|---|---|---|---|---|
| *Permanent Positions:* | | | | | | | | |
| *Traffic Safety Programs (HQ)* | *0* | *0* | *0* | *0* | *103* | *4* | *13* | *120* |
| *Regions* | *0* | *0* | *0* | *0* | *18* | *62* | *0* | *80* |
| *Plus: Mission Support* | *0* | *0* | *0* | *0* | *8* | *0* | *0* | *8* |
| *Total FTPs* | *0* | *0* | *0* | *0* | *129* | *66* | *13* | *208* |
| Dollars: | | | | | | | | |
| Salaries & Benefits | 0 | 0 | 0 | 0 | 9,401 | 4,643 | 890 | 14,934 |
| Travel | 0 | 0 | 0 | 0 | 366 | 250 | 0 | 616 |
| Operating Expenses | 0 | 0 | 0 | 0 | 2,286 | 375 | 0 | 2,661 |
| Contract Program: | | | | | | | | |
| Alcohol & State Programs | 0 | 0 | 0 | 1,530 | 7,706 | 0 | 0 | 9,236 |
| Occupant Protection Program | 0 | 0 | 0 | 0 | 5,689 | 0 | 0 | 5,689 |
| Enforcement & EMS | 0 | 0 | 0 | 0 | 1,978 | 0 | 0 | 1,978 |
| Highway Safety Research | 0 | 0 | 0 | 0 | 4,095 | 0 | 0 | 4,095 |
| Records | 0 | 0 | 0 | 0 | 1,330 | 0 | 0 | 1,330 |
| Contract Subtotal | 0 | 0 | 0 | 1,530 | 20,798 | 0 | 0 | 22,328 |
| Total Dollars | 0 | 0 | 0 | 1,530 | 32,851 | 5,268 | 890 | 40,539 |

## OPERATIONS AND RESEARCH

## LEGISLATIVE AUTHORIZATION FOR FY 1995 CONGRESSIONAL SUBMISSION

(Dollars in Thousands)

| RESEARCH & ANALYSIS | National Traffic and Motor Vehicle Safety Act | Motor Vehicle Information and Cost Savings Act | Anti Car Theft Act of 1992 | Drug Recognition Expert Training | Section 403 of Highway Safety Act | State Formula Grant Admin. (Highway Safety Act) | Nat'l Driver Register Admin. Expenses | Total |
|---|---|---|---|---|---|---|---|---|
| *Permanent Positions:* | | | | | | | | |
| *Motor Vehicle Research* | *78* | *0* | *0* | *0* | *0* | *0* | *0* | *78* |
| *NCSA* | *21* | *0* | *0* | *0* | *26* | *0* | *0* | *47* |
| *Plus: Mission Support* | *5* | *0* | *0* | *0* | *2* | *0* | *0* | *7* |
| *Total FTPs* | *104* | *0* | *0* | *0* | *28* | *0* | *0* | *132* |
| Dollars: | | | | | | | | |
| Salaries & Benefits | 7,479 | 0 | 0 | 0 | 2,014 | 0 | 0 | 9,493 |
| Travel | 109 | 0 | 0 | 0 | 31 | 0 | 0 | 140 |
| Operating Expenses | 2,084 | 0 | 0 | 0 | 477 | 0 | 0 | 2,561 |
| Contract Program: | | | | | | | | |
| Motor Vehicle Research | 20,418 | 0 | 0 | 0 | 0 | 0 | 0 | 20,418 |
| NCSA | 8,221 | 0 | 0 | 0 | 8,051 | 0 | 0 | 16,272 |
| Technology Transfer | 26 | 0 | 0 | 0 | 14 | 0 | 0 | 40 |
| Contract Subtotal | 28,665 | 0 | 0 | 0 | 8,065 | 0 | 0 | 36,730 |
| Total Dollars | 38,337 | 0 | 0 | 0 | 10,587 | 0 | 0 | 48,924 |

## OPERATIONS AND RESEARCH

## LEGISLATIVE AUTHORIZATION FOR FY 1995 CONGRESSIONAL SUBMISSION

(Dollars in Thousands)

| | National Traffic and Motor Vehicle Safety Act | Motor Vehicle Information and Cost Savings Act | Anti Car Theft Act of 1992 | Drug Recognition Expert Training | Section 403 of Highway Safety Act | State Formula Grant Admin. (Highway Safety Act) | Nat'l Driver Register Admin. Expenses | Total |
|---|---|---|---|---|---|---|---|---|
| **OFFICE OF THE ADMINISTRATOR AND STAFF OFFICES** | | | | | | | | |
| *Permanent Positions:* | | | | | | | | |
| *Office of the Administrator and Staff Offices* | *45* | *3* | *0* | *0* | *15* | *0* | *0* | *63* |
| *Less: Mission Support* | *(15)* | *(3)* | *0* | *0* | *(4)* | *0* | *0* | *(22)* |
| *Net FTPs* | *30* | *0* | *0* | *0* | *11* | *0* | *0* | *41* |
| Dollars: | | | | | | | | |
| Salaries & Benefits | 2,158 | 0 | 0 | 0 | 791 | 0 | 0 | 2,949 |
| Travel | 50 | 0 | 0 | 0 | 19 | 0 | 0 | 69 |
| Operating Expenses | 512 | 0 | 0 | 0 | 187 | 0 | 0 | 699 |
| Total Dollars | 2,720 | 0 | 0 | 0 | 997 | 0 | 0 | 3,717 |

## OPERATIONS AND RESEARCH

## LEGISLATIVE AUTHORIZATION FOR FY 1995 CONGRESSIONAL SUBMISSION

(Dollars in Thousands)

| GENERAL ADMINISTRATION | National Traffic and Motor Vehicle Safety Act | Motor Vehicle Information and Cost Savings Act | Anti Car Theft Act of 1992 | Drug Recognition Expert Training | Section 403 of Highway Safety Act | State Formula Grant Admin. (Highway Safety Act) | Nat'l Driver Register Admin. Expenses | Total |
|---|---|---|---|---|---|---|---|---|
| *Permanent Positions:* | | | | | | | | |
| *Administration (including Plans & Policy)* | *83* | *6* | *0* | *0* | *26* | *0* | *0* | *115* |
| *Less: Mission Support* | *(13)* | *(6)* | *0* | *0* | *(6)* | *0* | *0* | *(25)* |
| *Net FTPs* | *70* | *0* | *0* | *0* | *20* | *0* | *0* | *90* |
| Dollars: | | | | | | | | |
| Salaries & Benefits | 5,035 | 0 | 0 | 0 | 1,438 | 0 | 0 | 6,473 |
| Travel | 33 | 0 | 0 | 0 | 9 | 0 | 0 | 42 |
| Operating Expenses | 1,193 | 0 | 0 | 0 | 341 | 0 | 0 | 1,534 |
| Contract Program: | | | | | | | | |
| Program Evaluation | 250 | 0 | 0 | 0 | 239 | 0 | 0 | 489 |
| Strategic Planning | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 200 |
| Economic Analysis | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 |
| Contract Subtotal | 450 | 0 | 0 | 0 | 339 | 0 | 0 | 789 |
| Total Dollars | 6,711 | 0 | 0 | 0 | 2,127 | 0 | 0 | 8,838 |

## OPERATIONS AND RESEARCH

## LEGISLATIVE AUTHORIZATION FOR FY 1995 CONGRESSIONAL SUBMISSION

(Dollars in Thousands)

| NHTSA TOTAL | National Traffic and Motor Vehicle Safety Act | Motor Vehicle Information and Cost Savings Act | Anti Car Theft Act of 1992 | Drug Recognition Expert Training | Section 403 of Highway Safety Act | State Formula Grant Admin. (Highway Safety Act) | Nat'l Driver Register Admin. Expenses | Total |
|---|---|---|---|---|---|---|---|---|
| *Permanent Positions* | *371* | *24* | *0* | *0* | *188* | *66* | *13* | *662* |
| Dollars: | | | | | | | | |
| Salaries & Benefits | 26,684 | 1,726 | 0 | 0 | 13,644 | 4,643 | 890 | 47,587 |
| Travel | 331 | 16 | 0 | 0 | 425 | 250 | 0 | 1,022 |
| Operating Expenses | 7,279 | 409 | 0 | 0 | 3,291 | 375 | 0 | 11,354 |
| Contract Program | 38,053 | 3,245 | 0 | 1,530 | 29,202 | 0 | 0 | 72,030 |
| Total, NHTSA | 72,347 | 5,396 | 0 | 1,530 | 46,562 | 5,268 | 890 | 131,993 |

EXHIBIT IA

### DEPARTMENT OF TRANSPORTATION
### NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
### RESOURCE SUMMARY - FINANCING
($ in thousands)

| | BUDGET AUTHORITY | | |
|---|---|---|---|
| APPROPRIATION TITLE | FY 1993 ACTUAL | FY 1994 ENACTED | FY 1995 REQUEST |
| Operation and Research: | | | |
| General Funds | $82,080 | $75,909 | $77,743 |
| Highway Trust Fund | 46,170 | 48,236 | 48,092 |
| Operations and Research (net) | 128,250 | 124,145 | 125,835 |
| Highway Traffic Safety Grants (Highway Trust Fund) | 171,000* | 196,000* | 196,000* |
| Miscellaneous Safety Programs | 0 | 0 | 0 |
| TOTAL BUDGET AUTHORITY | 299,250 | 320,145 | 321,835 |

* Reflects amount authorized, which differs from the program level.

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| | | | |
|---|---|---|---|
| LIQUIDATING CASH APPROPRIATIONS: | | | |
| Highway Traffic Safety Grants | 150,000 | 138,550 | 151,000 |

EXHIBIT IB

# DEPARTMENT OF TRANSPORTATION
# NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
## RESOURCE SUMMARY - FINANCING
($ in thousands)

| APPROPRIATION TITLE | PROGRAM LEVEL (OBLIGATIONS) FY 1993 ACTUAL | FY 1994 ENACTED | FY 1995 REQUEST |
|---|---|---|---|
| Operation and Research: | | | |
| General Funds | $84,552 | $89,687 | $77,743 |
| Highway Trust Fund | 46,170 | 48,236 | 48,092 |
| Operations and Research (net) | 130,722 | 137,923 | 125,835 |
| Highway Traffic Safety Grants (Highway Trust Fund) | 141,650 | 174,000 | 151,400 |
| Miscellaneous Safety Programs | 10 | 6 | 0 |
| TOTAL PROGRAM LEVEL (OBLIGATIONS) | 272,382 | 311,929 | 277,235 |
| OBLIGATION LIMITATIONS: Highway Traffic Safety Grants: | | | |
| Section 402 State and Community Safety Formula Grants | 115,000 | 123,000 | 123,000 |
| Section 408 Alcohol Safety Incentive Grants | 11,000 | 10,500 | -- |
| Section 410 Alcohol-Impaired Driving Countermeasures Grants | -- | 25,000 | 25,000 |
| Section 153 Safety Belt Use and Motorcycle Helmet Use Grants | 12,000 | 12,000 | -- |
| National Driver Register | 3,650 | 3,500 | 3,400 |
| TOTAL OBLIGATION LIMITATIONS | 141,650 | 174,000 | 151,400 |

EXHIBIT IC

### DEPARTMENT OF TRANSPORTATION
### NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
### RESOURCE SUMMARY - FINANCING
($ in thousands)

| APPROPRIATION TITLE | OUTLAYS | | |
|---|---|---|---|
| | FY 1993 ACTUAL | FY 1994 ENACTED | FY 1995 REQUEST |
| Operation and Research: | | | |
| General Funds | $57,847 | $87,274 | $83,169 |
| Highway Trust Fund | 41,647 | 55,161 | 55,925 |
| Operations and Research (net) | 99,494 | 142,435 | 139,094 |
| Highway Traffic Safety Grants (Highway Trust Fund) | 137,027 | 140,416 | 149,632 |
| Miscellaneous Safety Programs | 5,256 | 195 | -- |
| TOTAL OUTLAYS | 241,777 | 283,046 | 288,726 |

EXHIBIT II

### DEPARTMENT OF TRANSPORTATION
### NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
### RESOURCE SUMMARY - STAFFING

| | FY 1993 ACTUAL | FY 1994 ENACTED | FY 1995 REQUEST |
|---|---|---|---|
| FULL-TIME PERMANENT (FTP) POSITIONS: | | | |
| Operations & Research (General Funds) | 401 | 400 | 395 |
| Operations & Research (Trust Fund) | 167 | 187 | 188 |
| Highway Traffic Safety Grants | 100 | 80 | 79 |
| TOTAL AUTHORIZED FTPs | 668 | 667 | 662 |
| FULL-TIME EQUIVALENT (FTE) STAFF-YEARS | | | |
| FTE Subject to Ceiling: | | | |
| Ceiling FTE - FTP | 646 | 637 | 631 |
| Ceiling FTE - OTFTP | 42 | 34 | 34 |
| Ceiling FTE - Total | 688 | 671 | 665 |
| Non-Ceiling FTE - OTFTP | 26 | 19 | 19 |
| Reduction | -- | -7 | -17 |
| TOTAL CEILING AND NON-CEILING FTE | 714 | 683 | 667 |
| TOTAL END-OF-YEAR EMPLOYMENT (IN FTP POSITIONS) | 627 | 637 | 632 |

NOTE: Includes positions and full-time equivalent staff-years funded from Operations and Research (General Funds) and Operations and Research (Highway Trust Fund) as well as from funds transferred for grant administration from the Highway Traffic Safety Grants account.

## OPERATIONS AND RESEARCH
(Dollars In Thousands)

| | FY 1994 APPROPRIATION | | | | FY 1995 CONGRESSIONAL SUBMISSION | | | | FY 1995 OVER FY 1994 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | O & R Federal | O & R Trust | Grant Admin. | Total | O & R Federal | O & R Trust | Grant Admin. | Total | O & R Federal | O & R Trust | Grant Admin. | Total |
| **RULEMAKING** | | | | | | | | | | | | |
| *Permanent Positions:* | | | | | | | | | | | | |
| *Headquarters* | *69* | *0* | *0* | *69* | *69* | *0* | *0* | *69* | *0* | *0* | *0* | *0* |
| *Plus: Mission Support* | *26* | *0* | *0* | *26* | *26* | *0* | *0* | *26* | *0* | *0* | *0* | *0* |
| *Total FTPs* | *95* | *0* | *0* | *95* | *95* | *0* | *0* | *95* | *0* | *0* | *0* | *0* |
| Dollars: | | | | | | | | | | | | |
| Salaries & Benefits | 6,557 | 0 | 0 | 6,557 | 6,833 | 0 | 0 | 6,833 | 276 | 0 | 0 | 276 |
| Travel | 51 | 0 | 0 | 51 | 60 | 0 | 0 | 60 | 9 | 0 | 0 | 9 |
| Operating Expenses | 1,384 | 0 | 0 | 1,384 | 1,619 | 0 | 0 | 1,619 | 235 | 0 | 0 | 235 |
| Contract Program: | | | | | | | | | | | | |
| Vehicle Safety & Consumer Stds | 500 | 0 | 0 | 500 | 500 | 0 | 0 | 500 | 0 | 0 | 0 | 0 |
| New Car Assessment Program | 1,860 | 0 | 0 | 1,860 | 2,460 | 0 | 0 | 2,460 | 600 | 0 | 0 | 600 |
| Fuel Economy | 160 | 0 | 0 | 160 | 785 | 0 | 0 | 785 | 625 | 0 | 0 | 625 |
| Theft and Other | 110 | 0 | 0 | 110 | 0 | 0 | 0 | 0 | (110) | 0 | 0 | (110) |
| Subtotal, Contract Program | 2,630 | 0 | 0 | 2,630 | 3,745 | 0 | 0 | 3,745 | 1,115 | 0 | 0 | 1,115 |
| Total Dollars | 10,622 | 0 | 0 | 10,622 | 12,257 | 0 | 0 | 12,257 | 1,635 | 0 | 0 | 1,635 |

## OPERATIONS AND RESEARCH
(Dollars in Thousands)

| | FY 1994 APPROPRIATION | | | | FY 1995 CONGRESSIONAL SUBMISSION | | | | FY 1995 OVER FY 1994 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | O & R Federal | O & R Trust | Grant Admin. | Total | O & R Federal | O & R Trust | Grant Admin. | Total | O & R Federal | O & R Trust | Grant Admin. | Total |
| **ENFORCEMENT** | | | | | | | | | | | | |
| *Permanent Positions:* | | | | | | | | | | | | |
| *Headquarters* | *91* | *0* | *0* | *91* | *88* | *0* | *0* | *88* | *(3)* | *0* | *0* | *(3)* |
| *Field, San Angelo* | *2* | *0* | *0* | *2* | *2* | *0* | *0* | *2* | *0* | *0* | *0* | *0* |
| *Field, Odometer* | *4* | *0* | *0* | *4* | *0* | *0* | *0* | *0* | *(4)* | *0* | *0* | *(4)* |
| *Plus: Mission Support* | *6* | *0* | *0* | *6* | *6* | *0* | *0* | *6* | *0* | *0* | *0* | *0* |
| *Total FTPs* | *103* | *0* | *0* | *103* | *96* | *0* | *0* | *96* | *(7)* | *0* | *0* | *(7)* |
| Dollars: | | | | | | | | | | | | |
| Salaries & Benefits | 7,109 | 0 | 0 | 7,109 | 6,905 | 0 | 0 | 6,905 | (204) | 0 | 0 | (204) |
| Travel | 86 | 0 | 0 | 86 | 95 | 0 | 0 | 95 | 9 | 0 | 0 | 9 |
| Operating Expenses | 2,068 | 0 | 0 | 2,068 | 2,280 | 0 | 0 | 2,280 | 212 | 0 | 0 | 212 |
| Contract Program: | | | | | | | | | | | | |
| Vehicle Safety Compliance | 5,500 | 0 | 0 | 5,500 | 5,400 | 0 | 0 | 5,400 | (100) | 0 | 0 | (100) |
| Defects Investigation | 3,038 | 0 | 0 | 3,038 | 3,038 | 0 | 0 | 3,038 | 0 | 0 | 0 | 0 |
| Subtotal, Contract Program | 8,538 | 0 | 0 | 8,538 | 8,438 | 0 | 0 | 8,438 | (100) | 0 | 0 | (100) |
| Total Dollars | 17,801 | 0 | 0 | 17,801 | 17,718 | 0 | 0 | 17,718 | (83) | 0 | 0 | (83) |

## OPERATIONS AND RESEARCH
(Dollars In Thousands)

| | FY 1994 APPROPRIATION | | | | FY 1995 CONGRESSIONAL SUBMISSION | | | | FY 1995 OVER FY 1994 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **HIGHWAY SAFETY** | O & R Federal | O & R Trust | Grant Admin. | Total | O & R Federal | O & R Trust | Grant Admin. | Total | O & R Federal | O & R Trust | Grant Admin. | Total |
| *Permanent Positions:* | | | | | | | | | | | | |
| *Traffic Safety Programs HQ* | *0* | *102* | *18* | *120* | *0* | *103* | *17* | *120* | *0* | *1* | *(1)* | *0* |
| *Field, Regions* | *0* | *18* | *62* | *80* | *0* | *18* | *62* | *80* | *0* | *0* | *0* | *0* |
| *Plus: Mission Support* | *0* | *8* | *0* | *8* | *0* | *8* | *0* | *8* | *0* | *0* | *0* | *0* |
| *Total FTPs* | *0* | *128* | *80* | *208* | *0* | *129* | *79* | *208* | *0* | *1* | *(1)* | *0* |
| Dollars: | | | | | | | | | | | | |
| Salaries & Benefits | 0 | 8,937 | 5,418 | 14,355 | 0 | 9,401 | 5,533 | 14,934 | 0 | 464 | 115 | 579 |
| Travel | 0 | 363 | 250 | 613 | 0 | 366 | 250 | 616 | 0 | 3 | 0 | 3 |
| Operating Expenses | 0 | 1,969 | 375 | 2,344 | 0 | 2,286 | 375 | 2,661 | 0 | 317 | 0 | 317 |
| Contract Program: | | | | | | | | | | | | |
| Alcohol, Drug & State Prog. | 0 | 9,703 | 0 | 9,703 | 0 | 9,236 | 0 | 9,236 | 0 | (467) | 0 | (467) |
| Occupant Protection Program | 0 | 5,112 | 0 | 5,112 | 0 | 5,689 | 0 | 5,689 | 0 | 577 | 0 | 577 |
| Enforcement & EMS | 0 | 1,839 | 0 | 1,839 | 0 | 1,978 | 0 | 1,978 | 0 | 139 | 0 | 139 |
| Highway Safety Research | 0 | 4,368 | 0 | 4,368 | 0 | 4,095 | 0 | 4,095 | 0 | (273) | 0 | (273) |
| Records and Licensing | 0 | 1,140 | 0 | 1,140 | 0 | 1,330 | 0 | 1,330 | 0 | 190 | 0 | 190 |
| Model Acc. Rec. System | 0 | 1,000 | 0 | 1,000 | 0 | 0 | 0 | 0 | 0 | (1,000) | 0 | (1,000) |
| Subtotal, Contract Program | 0 | 23,162 | 0 | 23,162 | 0 | 22,328 | 0 | 22,328 | 0 | (834) | 0 | (834) |
| Total Dollars | 0 | 34,431 | 6,043 | 40,474 | 0 | 34,381 | 6,158 | 40,539 | 0 | (50) | 115 | 65 |

## OPERATIONS AND RESEARCH
(Dollars In Thousands)

|  | FY 1994 APPROPRIATION |  |  |  | FY 1995 CONGRESSIONAL SUBMISSION |  |  |  | FY 1995 OVER FY 1994 |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **RESEARCH & ANALYSIS** | O & R Federal | O & R Trust | Grant Admin. | Total | O & R Federal | O & R Trust | Grant Admin. | Total | O & R Federal | O & R Trust | Grant Admin. | Total |
| *Permanent Positions:* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Headquarters* | *71* | *26* | *0* | *97* | *73* | *26* | *0* | *99* | *2* | *0* | *0* | *2* |
| *Field, VRTC* | *26* | *0* | *0* | *26* | *26* | *0* | *0* | *26* | *0* | *0* | *0* | *0* |
| *Plus: Mission Support* | *5* | *2* | *0* | *7* | *5* | *2* | *0* | *7* | *0* | *0* | *0* | *0* |
| *Total FTPs* | *102* | *28* | *0* | *130* | *104* | *28* | *0* | *132* | *2* | *0* | *0* | *2* |
| Dollars: |  |  |  |  |  |  |  |  |  |  |  |  |
| Salaries & Benefits | 7,040 | 1,933 | 0 | 8,973 | 7,479 | 2,014 | 0 | 9,493 | 439 | 81 | 0 | 520 |
| Travel | 101 | 29 | 0 | 130 | 109 | 31 | 0 | 140 | 8 | 2 | 0 | 10 |
| Operating Expenses | 1,750 | 408 | 0 | 2,158 | 2,084 | 477 | 0 | 2,561 | 334 | 69 | 0 | 403 |
| Contract Program: |  |  |  |  |  |  |  |  |  |  |  |  |
| Motor Vehicle Research | 20,947 | 0 | 0 | 20,947 | 20,418 | 0 | 0 | 20,418 | (529) | 0 | 0 | (529) |
| NCSA | 8,779 | 8,494 | 0 | 17,273 | 8,221 | 8,051 | 0 | 16,272 | (558) | (443) | 0 | (1,001) |
| Technology Transfer | 26 | 14 | 0 | 40 | 26 | 14 | 0 | 40 | 0 | 0 | 0 | 0 |
| Subtotal, Contract Program | 29,752 | 8,508 | 0 | 38,260 | 28,665 | 8,065 | 0 | 36,730 | (1,087) | (443) | 0 | (1,530) |
| Total Dollars | 38,643 | 10,878 | 0 | 49,521 | 38,337 | 10,587 | 0 | 48,924 | (306) | (291) | 0 | (597) |

## OPERATIONS AND RESEARCH
(Dollars In Thousands)

| OFFICE OF THE ADMINISTRATOR AND STAFF OFFICES | FY 1994 APPROPRIATION | | | | FY 1995 CONGRESSIONAL SUBMISSION | | | | FY 1995 OVER FY 1994 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | O & R Federal | O & R Trust | Grant Admin. | Total | O & R Federal | O & R Trust | Grant Admin. | Total | O & R Federal | O & R Trust | Grant Admin. | Total |
| *Permanent Positions:* | | | | | | | | | | | | |
| *Headquarters* | *48* | *15* | *0* | *63* | *48* | *15* | *0* | *63* | *0* | *0* | *0* | *0* |
| *Less: Mission Support* | *(18)* | *(4)* | *0* | *(22)* | *(18)* | *(4)* | *0* | *(22)* | *0* | *0* | *0* | *0* |
| *Net FTPs* | *30* | *11* | *0* | *41* | *30* | *11* | *0* | *41* | *0* | *0* | *0* | *0* |
| Dollars: | | | | | | | | | | | | |
| Salaries & Benefits | 2,071 | 759 | 0 | 2,830 | 2,158 | 791 | 0 | 2,949 | 87 | 32 | 0 | 119 |
| Travel | 46 | 17 | 0 | 63 | 50 | 19 | 0 | 69 | 4 | 2 | 0 | 6 |
| Operating Expenses | 437 | 160 | 0 | 597 | 512 | 187 | 0 | 699 | 75 | 27 | 0 | 102 |
| Total Dollars | 2,554 | 936 | 0 | 3,490 | 2,720 | 997 | 0 | 3,717 | 166 | 61 | 0 | 227 |

## OPERATIONS AND RESEARCH
(Dollars In Thousands)

| | FY 1994 APPROPRIATION | | | | FY 1995 CONGRESSIONAL SUBMISSION | | | | FY 1995 OVER FY 1994 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | O & R Federal | O & R Trust | Grant Admin. | Total | O & R Federal | O & R Trust | Grant Admin. | Total | O & R Federal | O & R Trust | Grant Admin. | Total |
| **GENERAL ADMINISTRATION** | | | | | | | | | | | | |
| *Permanent Positions:* | | | | | | | | | | | | |
| *Headquarters* | *89* | *26* | *0* | *115* | *89* | *26* | *0* | *115* | *0* | *0* | *0* | *0* |
| *Less: Mission Support* | *(19)* | *(6)* | *0* | *(25)* | *(19)* | *(6)* | *0* | *(25)* | *0* | *0* | *0* | *0* |
| *Net FTPs* | *70* | *20* | *0* | *90* | *70* | *20* | *0* | *90* | *0* | *0* | *0* | *0* |
| Dollars: | | | | | | | | | | | | |
| Salaries & Benefits | 4,831 | 1,380 | 0 | 6,211 | 5,035 | 1,438 | 0 | 6,473 | 204 | 58 | 0 | 262 |
| Travel | 25 | 7 | 0 | 32 | 33 | 9 | 0 | 42 | 8 | 2 | 0 | 10 |
| Operating Expenses | 1,020 | 292 | 0 | 1,312 | 1,193 | 341 | 0 | 1,534 | 173 | 49 | 0 | 222 |
| Contract Program: | | | | | | | | | | | | |
| Program Evaluation | 250 | 250 | 0 | 500 | 250 | 239 | 0 | 489 | 0 | (11) | 0 | (11) |
| Strategic Planning | 63 | 62 | 0 | 125 | 100 | 100 | 0 | 200 | 37 | 38 | 0 | 75 |
| Economic Analysis | 100 | 0 | 0 | 100 | 100 | 0 | 0 | 100 | 0 | 0 | 0 | 0 |
| Subtotal, Contract Program | 413 | 312 | 0 | 725 | 450 | 339 | 0 | 789 | 37 | 27 | 0 | 64 |
| Total Dollars | 6,289 | 1,991 | 0 | 8,280 | 6,711 | 2,127 | 0 | 8,838 | 422 | 136 | 0 | 558 |

## OPERATIONS AND RESEARCH
(Dollars In Thousands)

| NHTSA SUMMARY | FY 1994 APPROPRIATION |  |  |  | FY 1995 CONGRESSIONAL SUBMISSION |  |  |  | FY 1995 OVER FY 1994 |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | O & R Federal | O & R Trust | Grant Admin. | Total | O & R Federal | O & R Trust | Grant Admin. | Total | O & R Federal | O & R Trust | Grant Admin. | Total |
| *Permanent Positions:* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Headquarters* | *368* | *169* | *18* | *555* | *367* | *170* | *17* | *554* | *(1)* | *1* | *(1)* | *(1)* |
| *Field* | *32* | *18* | *62* | *112* | *28* | *18* | *62* | *108* | *(4)* | *0* | *0* | *(4)* |
| *Total FTP* | *400* | *187* | *80* | *667* | *395* | *188* | *79* | *662* | *(5)* | *1* | *(1)* | *(5)* |
| Dollars: |  |  |  |  |  |  |  |  |  |  |  |  |
| Salaries & Benefits | 27,608 | 13,009 | 5,418 | 46,035 | 28,410 | 13,644 | 5,533 | 47,587 | 802 | 635 | 115 | 1,552 |
| Travel | 309 | 416 | 250 | 975 | 347 | 425 | 250 | 1,022 | 38 | 9 | 0 | 47 |
| Operating Expenses | 6,659 | 2,829 | 375 | 9,863 | 7,688 | 3,291 | 375 | 11,354 | 1,029 | 462 | 0 | 1,491 |
| Contract Program | 41,333 | 31,982 | 0 | 73,315 | 41,298 | 30,732 | 0 | 72,030 | (35) | (1,250) | 0 | (1,285) |
| Total, NHTSA | 75,909 | 48,236 | 6,043 | 130,188 | 77,743 | 48,092 | 6,158 | 131,993 | 1,834 | (144) | 115 | 1,805 |

## DEPARTMENT OF TRANSPORTATION
## NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

### Funding Summary

The Operations and Research (O&R) appropriation provides funding for salaries/expenses, operating expenses and contract programs. The resources for this account are derived from direct appropriations and from reimbursements for grant program administration of Highway Traffic Safety Grants (HTSG). The HTSG appropriation provides obligation limitations for grant programs authorized by the Highway Safety Act (as amended by ISTEA), and funds Section 402 State and Community Highway Safety Grants. Funding is also provided for Section 410 Alcohol-Impaired Driving Countermeasures Incentive Grants, and the National Driver Register. No funds are requested in FY 1995 for Section 408 Alcohol Incentive Grants and Section 153 Safety Belt and Motorcycle Helmet Use Incentive Grant programs.

| | FY 1994 Appropriation | FY 1995 Request | Increase (+) or Decrease (-) |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Operations and Research | | | |
| Rulemaking Programs............ | $10,622 | $12,257 | +$1,635 |
| Enforcement Programs........... | 17,801 | 17,718 | -83 |
| Highway Safety Programs........ | 40,474 | 40,539 | +65 |
| Research and Analysis Programs. | 49,521 | 48,924 | -597 |
| Office of the Administrator.... | 3,490 | 3,717 | +227 |
| General Administration......... | 8,280 | 8,838 | +558 |
| Operations & Research (gross). | 130,188 | 131,993 | +1,805 |
| Less:Grant Admin. Reimbursements | -6,043 | -6,158 | -115 |
| Operations & Research (net).. | 124,145 | 125,835 | +1,690 |
| Highway Traffic Safety Grants | | | |
| Section 402 Formula Grants.... | 123,000 | 123,000 | 0 |
| Section 408 Alcohol Safety Incentive Grants............. | 10,500 | 0 | -10,500 |
| Section 410 Alcohol-Impaired Driving Countermeasure Grants | 25,000 | 25,000 | 0 |
| Section 153 Safety Belt and Motorcycle Helmet Use Grants. | 12,000 | 0 | -12,000 |
| National Driver Register...... | 3,500 | 3,400 | -100 |
| Highway Traffic Safety Grants. | 174,000 | 151,400 | -22,600 |
| TOTAL PROGRAM.......... | 298,145 | 277,235 | -20,910 |

## OPERATIONS AND RESEARCH

## Summary of FY 1995 Increases

| | (Dollars in Thousands) |
|---|---|
| FY 1994 Appropriation: | |
| o Operations and Research (net) | $124,145 |
| o Grant Administration | 6,043 |
| Operations and Research (gross) | 130,188 |
| Base Adjustments: | |
| o Personnel Compensation and Benefits | +1,552 |
| o Travel | +47 |
| o Personnel-Related Costs | +77 |
| o Administrative Services | +389 |
| o Computer Support | +476 |
| o Field Operating Expenses | +136 |
| Subtotal | +2,677 |
| Adjusted Base | 132,865 |
| Program Changes: | |
| o Computer Support | +413 |
| o Contract Program | -1,285 |
| Subtotal | -872 |
| FY 1995 Request: | |
| o Operations and Research (net) | $125,835 |
| o Grant Administration | 6,158 |
| Operations and Research (gross) | 131,993 |

## OPERATIONS AND RESEARCH

### Analysis of FY 1995 Increases

SALARIES AND EXPENSES (+$1,599 thousand)

Salaries and expenses include personnel compensation and benefits (PC&B) and travel. The FY 1995 increase for these expenses is discussed below.

- Personnel Compensation and Benefits (+$1,552 thousand)

  The level requested for FY 1995 assumes technical adjustments will be made to the FY 1994 enacted level, including a reduction in full-time equivalent (FTE) staff-years. The FY 1994 enacted level, the adjustments, and the total level requested for FY 1995 are shown below:

(Dollars in Thousands)

| | |
|---|---|
| $ 46,035 | FY 1994 level for salaries and benefits before adjustment for FY 1994 locality pay. |
| +1,801 | Impact in FY 1995 of the FY 1994 locality pay adjustment (for GS/GM and SES employees but excluding "special rate" employees). |
| +220 | Technical adjustment to compensate for impact of FY 1994 funding shortfall. |
| +574 | Pay raise of 1.6 percent effective on January 1, 1995. The increase requested will provide the pay raise for three quarters during FY 1995. |
| +230 | Adjustment for Federal Employees' Retirement System (FERS). |
| -185 | Adjustment for one less work-day during FY 1995. (There are 260 work-days during FY 1995 compared with 261 work-days during FY 1994.) |
| -1,088 | Decrease associated with a net reduction of 16 full-time equivalent (FTE) staff-years. This net reduction is comprised of a reduction of 10 FTE pursuant to Executive Order requirements for government-wide staffing reductions, a reduction of 7 FTE (for 7 positions) due to proposed termination of the odometer fraud program, and an increase of 1 FTE for partial-year staffing of 2 new positions proposed for the IVHS program. |
| $ 47,587 | FY 1995 level requested for salaries and benefits. |

- Travel (+$47 thousand).

  The requested increase of $47 thousand will provide for travel cost increases.

OPERATING EXPENSES (+$1,491 thousand)

The budget for Headquarter's operating expenses includes personnel-related costs, administrative services, and computer support. These items are funded centrally at headquarters and are used to support the overall highway traffic safety mission of the agency. In addition, this budget submission includes the operating expenses of regional offices and several other field offices that directly support program and administrative activities. The changes from the FY 1994 request are in the following areas:

- Personnel Related Costs (+$77 thousand)

  An increase of $19 thousand in training will pay for billings from the DOT Working Capital Fund for activities paid through the NHTSA personnel related budget. An increase of $58 thousand in Permanent Change of Station will cover costs associated with the anticipated movement of staff between Headquarters and Regional Offices as a result of the overall downsizing of the Federal Government.

- Administrative Services (+$389 thousand)

  The increases in the Administrative Services category are for Other Services (+$71) to provide for additional contractor support for the Technical Reference Division to keep pace in responding to requests for information (Congressional, FOIA and general public), and to avoid the accumulation of a significant backlog of unanswered requests. There are also minimal increases in the Other Services category (+$20 thousand) to cover costs associated with Interagency Agreements. An increase of $211 thousand in the Printing and Reproduction category is to cover anticipated costs associated with publications and information items related to agency mission-related programs. An increase of $87 thousand will pay for billings from the DOT Working Capital Fund (WCF) for expenses paid through the NHTSA administrative services budget. (Note: additional Administrative Services costs of $121 thousand are transferred to and reflected in Field Operating Expenses).

- Computer Support (+$889 thousand)

  The FY 1995 request continues the agency efforts to increase the timeliness and quality of all its actions by increasing the efficiency of all agency employees. This increased efficiency will result by providing additional agency technical and professional staff quicker access to a broader range of agency data and statistical files in support of rulemaking and enforcement actions. Electronic sharing of agency historical information such as rulemaking dockets, legal interpretations, technical reports and current crash and fatality data will allow employees to electronically access and analyze information that is now difficult to obtain from existing paper filing systems. In addition, continued efforts to implement the agency's ability to respond to public inquiries about historical information and data by making such information available through electronic research, rather than laborious review of paper records.

  Operations & Maintenance - (+$476 thousand) - As the agency modernizes its information, processing, storage, and communications capabilities, it will achieve increased efficiencies in overall mission effectiveness. In order to obtain full benefit of their efficiencies, the systems will require additional support and maintenance to fully utilize their potential. Approximately 75 percent of the total FY 1995 request is required to maintain the infrastructure of equipment and pay OST mandated charges.

  The FY 1995 requested amount for Operations and Maintenance includes $340 thousand of additional funding for contract support to sustain the existing systems and networks. This support is needed to provide access to departmental, government, and highway safety community information resources on the planned information super highway. The remaining $136 thousand is needed for resources to support NHTSA participation in enhanced departmental communications capability, both in the field and headquarters. Without these additional resources, NHTSA will be unable to participate in this technology. The proper management of complex computer communications systems and mandatory security measures will not be possible without increases to the existing budget.

  Agency Wide Initiatives (+$413 thousand) - The agency will continue efforts initiated in prior years to complete full installation and utilization of the imaging network throughout the agency to enhance information development and exchange with the field offices. The imaging system will be modified in FY 1995 to replace obsolescent technology and to maximize benefit to the agency of emerging technology. Hardware and software must be improved to handle the increased workload expected within the agency and to improve communications capability with the public to access image files and reports. The local area networks are standardized with one electronic mail system to improve sharing of files, documents and mail. In addition, efforts will be undertaken to define and develop safety program management information exchange between NHTSA regions and state highway safety offices.

### Field Operating Expenses (+$136 thousand)

Of the $136 thousand increase in field operating expenses, $121 thousand results from the transfer of field operating expenses. These expenses were previously budgeted under Headquarter's Administrative Services, but have been included in the budgets of the field activities in FY 1995. These estimates are: VRTC ($103 thousand) and San Angelo ($18 thousand). The remaining $15 thousand increase represents inflationary costs to VRTC ($9 thousand) and San Angelo ($6 thousand).

## CONTRACT PROGRAM (-$1,285 thousand)

A net decrease of $1,285 thousand is proposed for the contract program for FY 1995. Contract program requirements are fully justified under each budget activity.

## OPERATING EXPENSES

| EXPENSES CATEGORY | FY 1994 Enacted | FY 1995 Request | Increase (+) or Decrease (-) |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| HQ OPERATING EXPENSES | | | |
| Personnel Related Costs | | | |
| Permanent Change of Station | $60 | $118 | +58 |
| Grievance Administration | 5 | 5 | 0 |
| Security Investigations | 20 | 20 | 0 |
| Training | 173 | 192 | +19 |
| Subtotal | 258 | 335 | +77 |
| Administrative Services | | | |
| Travel | 5 | 5 | 0 |
| Transportation of things | 130 | 134 | +4 |
| Other Rent, Comm., & Util. | 2,075 | 2,092 | +17 |
| Printing and Reproduction | 952 | 1,210 | +258 |
| Other services | 2,621 | 2,739 | +118 |
| Supplies and materials | 139 | 131 | -8 |
| Equipment | 186 | 186 | -0 |
| Subtotal | 6,108 | 6,497 | +389 |
| Computer Support | 2,042 | 2,931 | +889 |
| HEADQUARTERS, SUBTOTAL | 8,408 | 9,763 | +1,355 |
| FIELD OPERATING EXPENSES | | | |
| Regional Offices | 479 | 479 | 0 |
| San Angelo (1) | 334 | 358 | +24 |
| Vehicle Research and Test Center (2) | 642 | 754 | +112 |
| FIELD, SUBTOTAL | 1,455 | 1,591 | +136 |
| TOTAL OPERATING EXPENSES | 9,863 | 11,354 | +1,491 |

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NOTES:

(1) Expenses attributable to VRTC and San Angelo, but previously paid by Headquarters, are reflected in the Field Operating Expenses and will be paid by the Field Offices in FY 1995. This transfer has resulted in an increase of $18 thousand to San Angelo and $103 thousand to VRTC and a net decrease to HQ Operating expenses in the amount of $121 thousand.

(2) Of the total FY 1994 Headquarter's Operating Expenses, $4.4 million is paid through the Working Capital Fund and $648 thousand is estimated for reimbursable agreements with OST. In FY 1995, the Working Capital Fund estimate is $4.8 million and the reimbursable agreements with OST are estimated at $530 thousand.

## OPERATIONS AND RESEARCH

### Highlights Statement

The Operations and Research Appropriation provides funding for NHTSA's program activities as authorized by three major laws. The National Traffic and Motor Vehicle Safety Act provides for the establishment and enforcement of Federal safety standards for motor vehicles and associated equipment and research, including the operation of required testing facilities and the operation of the National Driver Register. The Motor Vehicle Information and Cost Savings Act, as amended, provides for the establishment of low-speed collision bumper standards; consumer information activities; odometer regulations; administration of automotive fuel economy standards; and anti-theft prevention. Under Section 403 of Title 23, United States Code, technical assistance is provided to the States to: develop, demonstrate and implement innovative countermeasures and processes proven to be effective in improving State and local highway safety problems.

For FY 1995, a program level of $125.8 million is requested for Operations and Research programs. A variety of information is presented as part of the detailed justifications for each budget activity funded from this appropriation: program objectives and description; overview of the FY 1994 program; detailed program justifications for the recommended FY 1995 program; and a summary of NHTSA's recent accomplishments.

## OPERATIONS AND RESEACH

### Summary of Budget Requirements

| | FY 1994 Appropriation | FY 1995 Request | Increase (+) or Decrease (-) |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Positions: | 667 | 662 | -5 |
| Use of Funds: | | | |
| Salaries & Expenses | $47,010 | $48,609 | +1,599 |
| Operating Expenses | 9,863 | 11,354 | +1,491 |
| Contract Program | 73,315 | 72,030 | -1,285 |
| Total, Operations & Research | 130,188 | 131,993 | +1,805 |
| Source of Funds: | | | |
| O&R Federal | 75,909 | 77,743 | +1,834 |
| O&R Trust | 48,236 | 48,092 | -144 |
| Grant Administration | 6,043 | 6,158 | +115 |
| Total, Operations & Research | 130,188 | 131,993 | +1,805 |

## OPERATIONS AND RESEARCH

For expenses necessary to discharge the functions of the Secretary with respect to traffic and highway safety under the Motor Vehicle Information and Cost Savings Act (Public Law 92-513, as amended) and the National Traffic and Motor Vehicle Safety Act (Public Law 89-563, as amended), [$75,909,000] $77,743,000, to remain available until September 30, [1996] 1997. (Department of Transportation and Related Agencies Appropriations Act, 1994.)

## OPERATIONS AND RESEARCH

## (HIGHWAY TRUST FUND)

For expenses necessary to discharge the functions of the Secretary with respect to traffic and highway safety under 23 U.S.C. 403 and section 2006 of the Intermodal Surface Transportation Efficiency Act of 1991, to be derived from the Highway Trust Fund, [$48,236,000] $48,092,000, to remain available until September 30, [1996] 1997. (Department of Transportation and Related Agencies Appropriations Act, 1994.)

# NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

## OPERATIONS AND RESEARCH

### Program and Performance Statement

Rulemaking Programs. Provides for rulemaking activity relative to the promulgation of Federal motor vehicle safety standards for new and used motor vehicles, tires, and safety-related equipment; automotive fuel economy standards required by the Energy Policy and Conservation Act; international harmonization of standards; regulatory reform; and information on motor vehicle safety required by the Motor Vehicle Information and Cost Savings Act. The agency's Priority Plan and the ISTEA/1991 rulemaking provisions will guide the regulatory and other safety activities of NHTSA during FY 1995.

Enforcement Programs. Provides for the enforcement of programs described under the rulemaking activity, including manufacturer compliance with motor vehicle safety and automotive fuel economy standards, investigation of safety-related motor vehicle defects and initiating recalls when warranted. Improvements in the receipt and usage of the Auto Safety Hotline data will be among key efforts in FY 1995, as will compliance with performance requirements for automatic crash and side impact protection, and child safety seats.

Highway Safety Programs. Provides for technical assistance to highway safety programs conducted by State and local governments, the private sector, universities and research units, and various safety associations and organizations. This assistance includes demonstration programs emphasizing alcohol and drug countermeasures, occupant protection usage, automatic crash protection, law enforcement, emergency medical and trauma care systems, traffic records, motorcycle riders, and pedestrian/ bicycle safety.

A number of key activities are planned for FY 1994, including older driver licensing programs, youth provisional licensing, traffic data to support prosecutors and judges, and further study of preventable death strategies in rural settings. In addition, Secretary Peña has set two important traffic safety program goals for the nation by 1997: NHTSA will undertake programs to reduce alcohol-related fatalities to 43 percent, and increase safety belt use to 75 percent. In FY 1995, the agency will launch a new combined Impaired Driving/Occupant Protection Program, developed during FY 1994 in cooperation with the States and major highway safety organizations, to address these goals.

Research and Analysis. Provides motor vehicle safety research and development in support of major NHTSA programs, including the collection and analysis of data to identify safety problems, develop alternative solutions, and assess costs, benefits, and effectiveness. Research will continue to concentrate on improving vehicle crashworthiness and crash avoidance, plus a sound crash information program. The FY 1995 budget includes funding to continue a national accident data collection program to improve problem identification, regulatory reform, and program evaluation activities. Funding is continued for biomechanics research, the fabrication, test and validation phase for the national advanced driver simulator at the University of Iowa (contingent upon the university securing $11 million in non-Federal cost sharing), and support of Intelligent Vehicle-Highway Systems (IVHS). A major priority is to continue to support improvement of State crash data systems which are increasingly of value to NHTSA's crash avoidance rulemaking and research programs; and implementation of a revised survey methodology for collecting data on safety belt use (to replace the discontinued 19-City Survey).

## RULEMAKING PROGRAM

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## RULEMAKING PROGRAM

### Highlights Statement

The Rulemaking Program budget provides for the promulgation of Federal motor vehicle safety standards under the National Traffic and Motor Vehicle Safety Act, automotive fuel economy standards under the Motor Vehicle Information and Cost Savings Act, and various consumer information programs authorized by both Acts. In addition, the Intermodal Surface Transportation Efficiency Act (ISTEA) enacted in December 1991, mandated the agency to initiate specific rulemakings related to motor vehicle safety.

Under the requirements of the National Traffic and Motor Vehicle Safety Act, the Rulemaking Program develops and recommends safety performance test procedures, devices, criteria, and standards for vehicles and associated equipment. The Rulemaking Program considers the costs of motor vehicle safety standards, the manufacturing lead-time requirements, and the relationship between new requirements, existing standards, and other design and performance aspects of motor vehicles.

The Intermodal Surface Transportation Efficiency Act of 1991 required NHTSA to initiate rulemakings in a number of areas: extending dynamic side impact protection for light trucks, vans and multipurpose passenger vehicles; addressing rollover protection; addressing the safety of child booster seats; improving the design of seat belts; improving the braking systems of heavy trucks by considering such improvements as antilock braking; considering methods to reduce head injuries; amending the Occupant Crash Protection standard to require full front seat air bags; and exploring the need for additional brake performance standards, including antilock brake standards, for passenger cars.

The Rulemaking Program also develops vehicle crashworthiness data and disseminates this information to the public under the New Car Assessment Program (NCAP). Under the Motor Vehicle Information and Cost Savings Act, the Rulemaking Program plans, develops, coordinates, and proposes corporate average fuel economy (CAFE) standards for passenger and non-passenger vehicles up to 8,500 pounds gross vehicle weight rating and any adjustments to the CAFE standards that may be necessary.

## RULEMAKING PROGRAM

### Summary of Budget Requirements

| | FY 1994 Appropriation | FY 1995 Request | Increase (+) or Decrease (-) |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Positions: | 95 | 95 | 0 |
| Use of Funds: | | | |
| Salaries & Expenses | $6,608 | $6,893 | +$285 |
| Operating Expenses | 1,384 | 1,619 | +235 |
| Contract Program | 2,630 | 3,745 | -1,115 |
| Total, Rulemaking | 10,622 | 12,257 | +1,635 |

Source of Funds:

The budget proposes funding from Operations and Research (Federal).

## RULEMAKING PROGRAM

### Contract Program Summary

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Vehicle Safety Standards | $705 | $500 | $500 |
| New Car Assessment Program | 2,220 | 1,860 | 2,460 |
| Theft and Other Consumer Programs | 90 | 110 | 0 |
| Fuel Economy Program | 0 | 160 | 785 |
| Total, Rulemaking | 3,015 | 2,630 | 3,745 |

## RULEMAKING PROGRAM

|  | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
|  | (Dollars in Thousands) |  |  |
| Vehicle Safety Standards | $705 | $500 | $500 |

### Program Objective

The objectives of the Vehicle Safety Standards Program are: to identify safety problem areas; to develop countermeasures; to collect and analyze information to support the development of, and amendments to, Federal motor vehicle safety standards; and to respond to questions, assertions, and comments on vehicle safety from internal and external organizations. To meet these objectives in a timely fashion, the program needs to obtain and analyze information on changes in automotive design and technology and on regulatory and non-regulatory alternatives to alleviating vehicle safety problems.

The results of these contractual efforts help the program to arrive at regulatory decisions on: the feasibility and practicality of regulatory alternatives; the safety performance levels of possible countermeasures; and the costs, benefits, and lead times needed to implement alternatives. The information derived from these efforts aids in the development and issuance of appropriate safety standards. The program is not a substitute for research; rather, it helps NHTSA answer questions that arise during the rulemaking process.

### Program Description

The program involves continuing and completing work on priority rulemaking projects established by NHTSA, addressing rulemakings initiated by petition, and responding to legislatively required rulemaking under the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA/1991). The agency will continue to fund research and testing in areas of high priority such as: improved braking in heavy trucks, passenger cars, and light trucks and vans; rollover crashes, including research on means to protect occupants and reduce ejections, such as improved roof strength and innovative glazing; seat strength; child safety; fuel system integrity; and safety issues related to alternatively fueled vehicles.

A major focus of NHTSA's quick-reaction funds will be to assure the safe introduction of alternatively fueled vehicles without impeding technological development. This funding supports response to public comments and refinement of test procedures, in advance of final rule issuance. The agency will fund research and testing to address the safe performance of vehicles using fuels such as compressed natural gas, liquefied petroleum gas, liquefied natural gas, and electric power, in view of rapidly developing technology in this area.

### FY 1994 Program

The quick-reaction contract funds requested for FY 1994 will be used primarily to continue or complete work on priority projects initiated in previous years and to address rulemakings initiated by petition. The agency will continue to fund research and testing to improve braking systems in heavy trucks, passenger cars, and light trucks and vans (LTV's); protect occupants in rollover crashes, including research on projects such as improved roof strength and door latches, and innovative glazing; investigate changes in seat strength requirements; improve child safety; and assess safety problems associated with electric and other alternatively-fueled vehicles.

Most of the final regulatory decisions for the rulemakings mandated in ISTEA/1991 will be made in FY 1994. In 1992, NHTSA initiated rulemaking in the major areas specified in the ISTEA. For many of these rulemakings, NPRMs (notices of proposed rulemaking) were issued in FY 1993. Cost and lead-time analyses will be completed to support the final regulatory decisions on these various rulemakings.

To address the injuries and fatalities that occur as a result of rollover crashes, a multifaceted approach is necessary that includes both crash avoidance and crashworthiness rulemakings. Work will continue to identify actions that the agency can take to lessen the risk of death and injury from this type of crash.

In response to ISTEA/1991, NHTSA anticipates that it may require antilock braking systems (ABS) on some types of passenger cars, light trucks, and multipurpose vehicles, or it may set performance standards for such equipment if it is used on vehicles. These requirements would be written to allow the greatest latitude in system design and not offer a competitive advantage to any particular manufacturer. Test procedures need to be developed to support these possible standards.

In 1992, NHTSA initiated a program to investigate seat back strength. Laboratory testing is needed to define performance levels and test procedures before a regulatory decision can be made.

As there are few alternatively-fueled vehicles on the road, there is little information available on the safety performance of these vehicles in crashes. The agency plans to gather information on the accident experience of these vehicles from selected fleet operators that use alternatively fueled vehicles. In-depth information will be sought on the safety performance of these vehicles in operation. This information will help the agency to evaluate the safety of these vehicles and to define possible areas for future program attention.

In FY 1993, NHTSA developed a plan to address the fuel system integrity of conventionally fueled vehicles, and research will be needed to define possible new performance criteria.

In support of its older driver program, NHTSA will take into consideration the physical frailties associated with aging in determining performance criteria for seat back strength, seat belt fit, and the light transmission performance of glazing.

FY 1995 Request

The quick-reaction contract funds being requested for FY 1995 will be used to complete work on priority projects initiated in previous years and to address rulemakings initiated by petition. The agency will continue to fund research and testing to: respond to comments on any proposed performance requirements for improved braking systems in passenger cars, light trucks, and vans (the last of the 1991 ISTEA rulemaking mandates) ($25 thousand); protect occupants in rollover crashes by completing rulemakings on glazing and door latches that may be initiated in FY 1994 ($75 thousand); improve child safety by exploring the development and use of instrumented child dummies and investigating ways to protect children in side impact crashes ($100 thousand); upgrade and augment measurement devices used with the Hybrid III test dummy ($100 thousand); explore the feasibility of upgrading frontal crash protection ($50 thousand); and monitor the potential safety problems associated with electric and other alternatively-fueled vehicles ($50 thousand).

The remaining $100 thousand will be used for additional alternative fuels activities. The number of alternatively fueled vehicles in use is expected to increase substantially because of the Administration's emphasis on clean-burning fuels, the requirements of the Clean Air Act Amendments of 1990, the Energy Policy Act of 1992, and various state laws mandating the use of such vehicles in various fleets. In response, the agency plans to assess the safety needs of these vehicles in terms of regulatory or other appropriate actions. NHTSA's continuing goal for alternatively-fueled vehicles is to ensure their safe introduction in large numbers without impeding technological development.

The FY 1995 activities on alternative fuels will build on the agency's FY 1994 study and analysis of the fleet operators' real-world experiences with these vehicles. Potential safety-related issues for investigation include electric vehicle battery technology and implications for safety in crashes ($30 thousand), gaseous fuels and the safety effects of evolving container technologies and vehicle system requirements for safe performance of liquefied natural gas and liquefied petroleum gas ($70 thousand).

Accomplishments

- Heavy trucks: Final rules on heavy truck conspicuity (December) and on automatic brake adjusters (October) were published in 1992; an NPRM addressing stopping distance requirements for testing braking was published in February 1993 and an NPRM requiring ABS systems on heavy vehicles was published in September 1993. Final rules on both subjects are expected in FY 1994 as is a final rule addressing rear underride guards for heavy trucks.

- Passenger cars, light trucks and multipurpose vehicles: As part of the brake improvement program mandated by ISTEA/1991, an ANPRM (Advanced Notice of Proposed Rulemaking) addressing the need for additional brake performance standards for passenger cars was issued in December 1993. An NPRM addressing methods of reducing head injuries was published in FY 1993. NPRMs extending dynamic side impact testing to LTV's, addressing occupant protection in rollover crashes, and the design of safety belts will be published in the first half of FY 1994. Also, in response to the ISTEA/1991 mandate, a final rule mandating the use of airbags in light vehicles was published in September 1993.

- Child safety: An NPRM concerning the safety of child booster seats was published in September 1993 and an NPRM addressing the need to test child seats with additional test dummies to assure adequate performance is scheduled for publication in the first half of FY 1994 in response to the ISTEA mandate. Final rules on both subjects are expected in 1994. In addition, a final rule addressing the need to firmly attach child seats to car seats was published in October 1993. The agency also published NPRM'S to warn parents not to use rear-facing child seats in seating positions with air bags (April 1993) and to allow child seats which can better protect children with breathing disorders (May 1993). Final rules for both subjects are expected in the first half of 1994.

  Three final rules addressing improved safety in school buses were published in FY 1993, concerning: improved mirror systems for school buses (December 1992); school bus emergency exits (November 1992); and wheel chair/occupant restraints (January 1993). A final rule on school bus body joint strength also should be published in FY 1994.

- Alternatively fueled vehicles: Because denatured alcohol is more toxic than gasoline when ingested, NHTSA published a final rule establishing anti-siphoning requirements for alcohol fueled vehicles in January 1993. In January 1993, the agency also issued three NPRMs on alternatively fueled vehicles; one NPRM proposed safety requirements for vehicles fueled by compressed natural gas; a second NPRM proposed to modify existing standards for controls and displays, and windshield defrosting and defogging, to accommodate electric vehicles; and the third NPRM addressed braking performance of electric vehicles. In December 1993, the agency published an SNPRM for compressed natural gas fuel containers to propose requirements similar to a voluntary industry standard. Final rules on CNG safety should be published in the first half of FY 1994.

- Other issues: An NPRM proposing to establish requirements for wheel chair lifts was published in February 1993; and a final rule is being prepared for publication in FY 1994.

## RULEMAKING PROGRAM

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| New Car Assessment Program (NCAP) | $2,220 | $1,860 | $2,460 |

### Program Objective

The objective of the agency's NCAP is to plan, design, and implement new and innovative programs which use market forces to encourage the production of safer motor vehicles.

NCAP's general approach and objective is to develop relative crashworthiness and crash avoidance information for consumers to assist them in selecting and purchasing safer motor vehicles. This program is in direct support of the Secretarial theme to ensure and promote a high level of transportation safety for passenger vehicle occupants.

### Program Description

NCAP responds to the Motor Vehicle Information and Cost Savings Act requirement that NHTSA provide to consumers relative crashworthiness data on passenger motor vehicles. These data are developed and disseminated to consumers to assist them in selecting and purchasing safer motor vehicles.

High-speed crash tests are conducted on passenger cars, light trucks, and vans to assess frontal safety. Results from these tests provide consumers with data on the rapidly changing safety characteristics of new makes and models for both frontal and side crashworthiness.

In addition, promotional activities are conducted to assure that consumers receive easily understandable and desired information in a timely fashion. These activities are being expanded to possibly include the distribution of NCAP information at strategic consumer locations [auto shows, dealerships, state departments of motor vehicles (DMV's), etc.] and support electronic methods (computerized FAX and telephone answering) for providing consumers with specific NCAP data on a timely basis.

### FY 1994 Program

Frontal crashworthiness testing (including test dummy maintenance) on approximately 39 motor vehicles will be conducted at a cost of $1.610 million. The resulting data from these tests will provide consumers with the relative crashworthiness of passenger vehicles in the most common injury-causing crash events (frontal impacts).

NCAP promotional activities and data dissemination, recommended from FY 1992 and FY 1993 studies, will be funded at a cost of $250 thousand. Of these funds, a one time expenditure of $50 thousand will be used to finalize the format of presentation material, such as public service radio and print media announcements and consumer brochures. The remaining $200 thousand will be used to develop, reproduce, and disseminate these promotional and consumer materials. This activity will greatly increase consumer knowledge of the availability of NCAP data and make the information more easily accessible for consumer use.

### FY 1995 Request

Frontal crashworthiness testing (including test dummy maintenance) and reporting on approximately 38 motor vehicles is budgeted at $1.64 million. Side impact crashworthiness testing (including dummy maintenance and procurement of side impact deformable barriers) and reporting on approximately 14 passenger cars is budgeted at $620 thousand. The resulting data from these tests will provide consumers with the relative crashworthiness of passenger vehicles in the two most common injury-causing crash events (frontal and side impacts).

This is a reduction of one test in the frontal impact testing from the FY 1994 level. However, due to increases in test costs and in vehicle purchasing prices, this is a $30 thousand increase for frontal testing over the FY 1994 budget request. With the continuing rapid change by the manufacturers to include safety improvements (airbags and better structures) in their vehicles, the agency needs to continue testing as many vehicles as possible to maintain the most up-to-date comparative information for use by consumers in their purchasing decisions.

With the successful completion of FY 1993 NCAP activities to assess the practicability and feasibility to provide consumer information on side impact crashes, approximately 14 side-impact tests will be conducted on MY 1995 automobiles at a cost of $620 thousand. This is the same level of funding as used in FY 1993 for developing the NCAP side-impact test procedures. The $620 thousand will be used to conduct the tests, maintain the side impact dummies, and purchase the deformable barriers.

The remaining $200 thousand in the FY 1995 Request will continue the funding of NCAP promotional and data dissemination activities. The $200 thousand will be used to maintain media advertising, distribution of NCAP promotional information at strategic consumer locations, and to support electronic methods for providing consumers with specific NCAP data at approximately the same level as in FY 1994.

Accomplishments

- To evaluate comparative frontal crashworthiness performance of new motor vehicles, frontal impact tests on 341 passenger cars and 98 light trucks, vans, and multipurpose vehicles have been conducted since 1979. Thirty-seven vehicles were tested in FY 1993 and 39 are expected to be tested in FY 1994. The performance data are made available to the public and industry through press releases and technical presentations. Beginning in FY 1991, the press releases were expanded to include projected results for certain vehicles that had not been redesigned since previous model year versions were crash tested. This approach provides the comparative information on many of the available models much earlier in the model year. For MY 1993 vehicles, information was available on 71 makes and models at the beginning of the model year. Data for the full year represent information on approximately 80 percent of the new vehicles sold in 1993. Test results from NCAP have shown significant improvements in potential occupant safety in the frontal crash condition.

- Improvements made in the NCAP press releases in FY 1992 included arranging the list of vehicles in order from lowest to highest driver Head Injury Criterion (HIC) and including information on antilock brake availability and safety belt adjustable upper anchorages.

- In the FY 1993 press releases, the agency included statements to enable the consumer to relate the HIC test measure to the probability of a serious head injury in a real world collision. To improve the graphical representation of HIC in these press releases, the agency introduced a new format that differentiates the HIC test result in a visual manner between head contact, non-contact, or a head to airbag interaction.

- For FY 1992, Congress directed NHTSA to improve methods for presenting and promoting NCAP, to determine the validity of NCAP test data in predicting actual "real world" crashes, and to address the efficacy of allowing automobile manufacturers to choose between the Hybrid II (low tech) and the Hybrid III (high tech) dummies for NCAP testing. As required by the House and Senate Appropriations Committees, the agency completed a report to Congress in February 1992 on the plan for responding to these directives. To meet this plan, the agency has; (1) enlisted the help of media experts to suggest improvements in promoting NCAP and completed consumer focus group studies to evaluate and develop new NCAP presentation methods for the car-buying public; (2) completed analyses to determine the validity of NCAP test data in predicting actual "real world" crashes. These analyses show significant correlation between NCAP test results and overall fatality risk in frontal crashes; and (3) issued a Federal Register notice which announced the agency's desire to establish the Hybrid III as the only testing device to be used in NCAP. Based on the comments received to the notice, the agency concluded that the Hybrid III dummy will be specified as the only device to be used in the program beginning with MY 1996. In addition, NHTSA will immediately, beginning with MY 1994 vehicles, use the Hybrid III exclusively for all seating positions in which the occupant is protected by an air bag. Since air bags are in the vast majority of passenger cars and are rapidly being introduced into light trucks, when coupled with manufacturer preference, nearly all seating positions in the MY 1994 NCAP will be tested with the Hybrid III. The agency has also issued a Notice of Proposed Rulemaking which will require mandatory use of the Hybrid III dummy in compliance testing for the occupant protection standard beginning with MY 1998. Analyses of comments received on these notices and NCAP test data were used to explain the differences between the two dummies and the effect that these differences have had on the NCAP results. A second report to Congress, as promised by the agency, which contains the results and conclusions of these activities, was delivered in December 1993.

- Based on recommendations from the focus group studies, the agency initiated a simplified NCAP data presentation format beginning with the MY 1994 news releases. In this simplified format, NCAP results are reported in a one to five star classification system, with five stars indicating the best crash protection. The star classifications are based on the combined injury effects of head and chest loads that occur in the NCAP tests. The first FY 1994 NCAP news release with the simplified format was issued on December 14, 1993. The news release included the star classifications of 49 MY 1994 vehicles.

- In a Federal Register notice published on January 3, 1994, the agency requested comments on the possibility of convening a public meeting on NCAP. The public meeting could provide an open forum for consumer groups, media, foreign governments, national and international safety organizations, and motor vehicle manufacturers to discuss future NCAP activities and goals. Such a meeting could be conducted in FY 1994.

- Ten side impact tests were completed in FY 1992 and 12 additional tests were conducted during FY 1993. From the results of these tests, NHTSA has determined the feasibility of a side impact consumer information program and established associated test procedures. No technical problems were encountered in the FY 1992 and FY 1993 tests.

## RULEMAKING PROGRAM

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Theft and Other Consumer Programs | $90 | $110 | $-0- |

### Program Objective

The Theft Prevention Program establishes standards for the reduction of automobile thefts and to foster a reduction in consumer premiums for comprehensive insurance.

### Program Description

As required by Title VI (Theft Prevention) of the Motor Vehicle Information and Cost Savings Act, the Theft Prevention Program establishes standards aimed at the reduction of motor vehicle thefts and a reduction in consumer premiums for comprehensive insurance. Insurance information is analyzed and theft rate data are reported.

Congress mandated in the Motor Vehicle Information and Cost Savings Act of 1972 that the agency provide collision insurance cost information to automobile dealers.

### FY 1994 Program

The theft prevention program includes a funding level of $110 thousand to develop theft occurrence reports for FY 1994. This funding permits NHTSA to issue consolidated information received from certain insurance companies (plus rental and leasing firms) regarding the number of vehicle thefts each calendar year, as well as the number of stolen vehicle recoveries. NHTSA also reports on changes in comprehensive insurance rates and insurance company payments for stolen vehicles. This is an increase of $20 thousand over the FY 1993 level due to the expansion of the requirements to include light trucks, vans, and sport utility vehicles, as required by the Anti Car Theft Act of 1992.

Collision insurance cost information will be printed and distributed to automobile dealers. In the absence of specific appropriated funds, only one copy per dealer will be provided.

### FY 1995 Request

No funding is being requested for the Theft Program in FY 1995 in an attempt to focus NHTSA's activities more precisely on safety.

However, one copy of collision insurance cost information will be printed and distributed to automobile dealers.

Accomplishments

- In FY 1993, the agency continued to promulgate actions required by Title VI of the Cost Savings Act to reduce and deter motor vehicle theft. The agency exempted eight car lines which were equipped with standard equipment anti-theft devices from the parts-marking requirements. The agency also designated three new car lines as likely high-theft vehicles for MY 1995.

- During FY 1993, the agency issued three notices of proposed rulemakings (NPRMs) and one advanced notice of proposed rulemaking (ANPRM) proposing procedures for implementing the provisions of the Anti Car Theft Act of 1992. The new procedures will apply to manufacturers of passenger motor vehicles which include any multipurpose passenger vehicle (MPV) and light-duty truck (LDT) with a GVWR of 6,000 pounds or less. One NPRM proposed that manufacturers be required to submit new vehicle information to the agency. Another NPRM reduced the number of vehicles which manufacturers can petition to be exempt from the parts-marking requirements beginning in MY 1997. The third notice will establish a new median theft rate for model years 1990 and 1991 motor vehicles. The final theft rate notice was published in FY 1994 establishing the new median theft rate at 3.5866. Vehicles that fall above the new median theft rate are subject to the parts-marking requirements. The ANPRM solicited comments on the definition of "passenger motor vehicle" to include along with passenger cars, any MPV and LDT with a GVWR of 6,000 pounds or less. Additionally, the notice requested comments on the definition of major parts for MPVs and LDTs.

- In November 1993, the agency issued an NPRM with procedures for implementing the provisions of the American Automobile Labeling Act. Rulemaking will be completed early in FY 1994. The requirements will apply to vehicle manufacturers, parts suppliers, and dealers.

- In FY 1993, to settle a lawsuit brought by Consumers Union, the agency initiated a program of providing automobile dealers with a consumer information brochure giving relative collision insurance cost rankings of cars by make and model. The initial mailing in FY 1993 and the mailing in FY 1994, are based on one copy per dealer, with the dealers being required to reproduce additional copies for their customers.

## RULEMAKING PROGRAM

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Fuel Economy Program | $-0- | $160 | $785 |

### Program Objective

The objective of the Fuel Economy Program is to monitor manufacturer progress in achieving established passenger automobile and light truck fuel economy standards, and to issue and amend standards whenever appropriate for conserving the nation's energy supply.

### Program Description

The Fuel Economy Program is mandated by the Energy Policy and Conservation Act of 1975, and requires that the agency establish and review fuel economy standards for passenger cars and light trucks. In FY 1991, the Department initiated an independent study of fuel economy and safety issues by the National Academy of Sciences (NAS). The NAS study was completed in FY 1992 and it provided an assessment of important technologies for improved fuel efficiency. The results of this study provided the agency with information on possible future directions for fuel economy standards. One of the conclusions of the NAS report was that government agencies have little information on the costs of fuel economy technologies and general developments in the automotive industry. Thus, for FY 1994, the agency plans to develop information on the manufacturing facilities and product plans of the North American automobile industry. For FY 1995, the agency plans to undertake evaluations of future technologies.

### FY 1994 Program

For FY 1994, funding of $60 thousand will be used to maintain the database initiated in FY 1993 ("plants and lines"). A one-time expenditure of $100 thousand will be used to expand the database to include financial data.

### FY 1995 Request

The FY 1995 budget request includes $60 thousand to maintain the plants and lines and financial database. The remainder of the funding ($725 thousand) will be used for studies of various emerging technologies that show promise of significantly improving the fuel economy of vehicles in the near term (5 to 10 years). The studies will evaluate the potential benefits from further development or refinement and wider use of technologies that are currently in production on a limited scale. The studies will not be limited to evaluating the potential fuel economy improvement, but will include issues of production and tooling costs, lead time for widespread application, emissions implications, and likely consumer acceptance. The topic areas will be selected to represent the most promising near-term technologies at the time the funds are allocated. The potential topic areas include:

(1) Two-cycle engines (with production to start at a plant in Tecumseh, MI),

(2) Variable valve timing (now in production on several Japanese and European cars),

(3) Lean-burn combustion (in production with varying capabilities and needing more effective $NO_x$ control),

(4) Direct injection diesel engines (in production on light trucks over 8,500 lbs GVWR in the U.S. and on passenger cars in Europe),

(5) Ceramic engine components (to permit engines to operate more efficiently at higher temperatures--turbocharger impellers and other parts in production in special applications),

(6) Continuously variable transmissions (in production on small cars such as the Subaru Justy for many years, but not yet adapted to larger production vehicles).

(7) Miller Cycle (under development by Mazda as an alternative to lean-burn combustion),

(8) Condenser cooling with phase change (used in some racing engines),

(9) Flywheel energy storage for recovering braking energy losses (with potential electric vehicle applications), and

(10) Full integration of electronic engine and transmission controls to optimize fuel economy and emissions (under development and in production to varying degrees).

These studies will strengthen the link between transportation and environmental policy in that they may provide justification for higher fuel economy standards if they demonstrate technological feasibility and economic practicability of emerging technologies. They support the safety of transportation systems in that they explore technologies that can enhance fuel economy performance without mandating weight reduction or compromising safety systems. They can serve as a catalyst to encourage auto manufacturers and suppliers to devote more investment to promising technologies which the studies identify. The average cost of each study will range between $150 thousand and $200 thousand; therefore it is expected that between four and six of the studies will be conducted with the FY 1995 funds.

Accomplishments

- One of the conclusions of the 1992 National Academy of Sciences (NAS) report on the potential to improve automobile fuel economy was that government agencies need to have a better understanding of the technical issues, costs, benefits, and risks of fuel economy regulation. To address this conclusion, a program was initiated in FY 1993 to compile a data base from public sources on each major manufacturer's current production plants and product lines under the Research and Development funding. This effort includes production capacities, production levels, employment levels, product plans, and recent changes in the facilities for each of the major auto manufacturers.

- Also during FY 1993, the agency issued a notice of proposed rulemaking for fuel economy standards for light truck fleets for model years (MYs) 1995-1997, a final rule for MY 1995 light trucks, and a notice terminating rulemaking for MY 1990 passenger cars that had been reopened in response to a court ruling.

- A final rule for MY 1996 and 1997 light truck fuel economy standards will be issued in FY 1994 as will an Advance Notice of Proprosed Rulemaking dealing with future (i.e., post 1997) model years.

# ENFORCEMENT PROGRAM

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## ENFORCEMENT PROGRAM

### Highlights Statement

The Enforcement budget provides funding for the enforcement of programs conducted under the rulemaking activity and the conduct of safety defect investigations. For enforcement purposes, rulemaking activities include promulgation of Federal motor vehicle safety standards for all motor vehicles and items of motor vehicle equipment and automotive fuel economy standards required by the Energy Policy and Conservation Act. The defects investigation program identifies and removes vehicles with safety-related defects from the nation's highways.

The mission of the Enforcement Program is to ensure that the safety benefits associated with Federal safety standards are realized on the road and that motorists are not exposed to an unreasonable safety risk due to a motor vehicle defect. This mission is accomplished by surveillance testing, technical investigations, and recall, when appropriate. The principal benefit of the Enforcement Program is to remove unsafe vehicles and vehicle equipment from the road, thus reducing the highway fatality rate. As such, the program improves overall fleet safety and is a critical component of the agency's Priority Plan.

The FY 1995 Vehicle Safety Compliance Test Program will include 20 tests for verification of compliance to the requirements of the dynamic side impact protection standard and 30 tests for verification of compliance to the requirements of several occupant crash protection standards. This will provide for an assessment of the side impact and crash protection performance across the spectrum of vehicles, including all sizes of passenger cars, vans, pickup trucks, and sport utility vehicles. The child safety seat compliance test program will continue to test all new seats on the market to all requirements of that standard. Additionally, all motorcycle helmets in the marketplace will be tested for compliance to the motorcycle helmet standard. The compliance test program will ensure that the safety benefits associated with the levels of performance established in the safety standards are being realized.

The Defects Investigation Program is a critical component of DOT's commitment to the safety of the Nation's transportation system. In FY 1995, the funding will provide for enhanced interaction with consumers in reporting safety defects in motor vehicles and items of motor vehicle equipment. This program provides direct support to the Department's management objective of "Supporting the Safety of our Transportation Systems" by removing unsafe vehicles from the road, thereby decreasing the magnitude of the casualties on our nation's highways and their associated health care costs. The program also supports the

Administration's efforts to foster partnerships with consumers by maintaining the Auto Safety Hotline, which provides safety-related information on a wide range of motor vehicle subjects and gives the public a means of reporting safety defects to the agency.

The agency is not seeking FY 1995 funding for the establishment of the National Motor Vehicle Title Information System, pursuant to Section 202 of the Anti Car Theft Act (P.L. 102-519). The act requires the establishment of the system by January 1996. The agency is awaiting the recommendations of the Motor Vehicle Titling, Registration, and Salvage Advisory Committee and studying all options available to meet the requirements of the Act including private sector participation. These recommendations, and other events ongoing in 1994, will allow the agency to determine the requirements of establishing the system. In the interim, separate authorizing legislation is being proposed by the Department to amend Section 202 (a) of the Anti Car Theft Act to permit the Secretary to extend the date for the establishment of the system, if such an extension is determined to be necessary.

Section 202 (a) (1) of the Anti Car Theft Act would be amended as follows:

"Not later than January 1996, **except as provided in (a) below,** ...

New section 202 (a) (1) (a):

**(a) If the Secretary determines the January 1996 date is not feasible, a Federal Register notice describing the reasons for the delay, and establishing a new deadline, will be published no later than December 31, 1994.**

The Anti Car Theft Act also requires a report to Congress due no later than January 1, 1997. A technical conforming amendment will be proposed to extend, until one year after the system is established, the report to Congress reviewing the States' progress in meeting the statute's requirements for participation in the system.

## ENFORCEMENT PROGRAM

### Summary of Budget Requirements

| | FY 1994 Appropriation | FY 1995 Request | Increase (+) or Decrease (-) |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Positions: | 103 | 96 | -7 |
| Use of Funds: | | | |
| Salaries & Expenses | $7,195 | $7,000 | -$195 |
| Operating Expenses | 2,068 | 2,280 | +212 |
| Contract Program | 8,538 | 8,438 | -100 |
| Total, Enforcement | 17,801 | 17,718 | -83 |

Source of Funds:

The budget proposes funding from Operations and Research (Federal).

## ENFORCEMENT PROGRAM

### Contract Program Summary

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Vehicle Safety Compliance | $4,852 | $5,500 | $5,400 |
| Defects Investigation | 2,163 | 3,038 | 3,038 |
| Odometer Fraud | 100 | 0 | 0 |
| Total, Enforcement | 7,115 | 8,538 | 8,438 |

## ENFORCEMENT PROGRAM

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Vehicle Safety Compliance | $4,852 | $5,500 | $5,400 |

### Program Objective

The objective of the compliance program is to ensure that all motor vehicles and motor vehicle equipment sold in the United States will provide the safety benefits associated with Federal safety standards. This program supports the Department's management objective of reducing the fatality rate by removing unsafe vehicles from the road, as well as NHTSA's Priority Plan objective of improving overall fleet safety. The Vehicle Safety Compliance Program provides the testing, inspection and investigation necessary to assure compliance with the minimum performance requirements of these standards. This objective is accomplished by testing a representative sample of motor vehicles and motor vehicle equipment to the requirements of the safety standards.

### Program Description

The compliance test program is an ongoing activity to ensure that motor vehicles and motor vehicle equipment comply with Federal safety standards. When promulgated, each standard has specific minimum performance requirements which must be satisfied by all vehicles and equipment subject to the standard. Compliance with these minimum requirements will ensure safety benefits are achieved on the road. The compliance program assesses whether vehicles and equipment are meeting these minimum requirements. In instances of a test failure, a technical investigation is conducted to determine if a noncompliance exists. This involves obtaining data from the manufacturer concerning self-certification that its product complied with the safety standard. If a noncompliance is found to exist that is precluding the safety benefits associated with a safety standard from being realized, this program seeks a recall and remedy of the subject vehicles and/or equipment. Further, the program supports litigation activities associated with the recall and assessment of civil penalties. Other activities in the Vehicle Safety Compliance Program are directed at enforcing regulations governing the importation of motor vehicles and motor vehicle equipment to ensure compliance with Federal standards and the evaluation of compliance with fuel economy standards.

FY 1994 Program

During FY 1994, the Vehicle Safety Compliance Program will continue to procure and test vehicles and vehicle equipment for compliance with the requirements of the safety standards. Thirty-one of the 51 safety standards in effect will be tested and compliance with 10 standards will be assessed through visual inspection. When test failures occur, technical investigations to determine the reasons for failure will be conducted and a determination on whether to proceed with a noncompliance investigation, including a recall of the affected vehicle or item of motor vehicle equipment will be made. Additionally, enforcement of regulations governing the importation of motor vehicles and items of motor vehicle equipment will continue, as well as evaluation of vehicle manufacturer's compliance with fuel economy standards and computation of appropriate civil penalties when these standards are not met.

The FY 1994 compliance testing program includes the initiation of the FMVSS 214, Side Impact Protection, dynamic compliance test program. Beginning in model year 1994, the dynamic side impact standards will become mandatory for 10 percent of each manufacturer's new car fleet. Fifteen passenger car crash tests will be conducted. The FMVSS 208, Occupant Crash Protection, program will remain at the FY 1993 level of testing, 35 vehicles, which will include all sizes of passenger cars equipped with air bags, light trucks and vans, sport utility vehicles and pickup trucks. This program will provide an assessment of the fleet compliance with FMVSS 208. FMVSS 131, School Bus Stop Arms, which is a new standard, will also be included in the FY 1994 program.

In addition, the compliance test program will include testing of all motorcycle helmets being sold in the U.S. This new initiative will provide helmet compliance information to complement agency and state efforts to establish effective motorcycle helmet use laws. Compliance testing will also be conducted on all child safety seats in the marketplace to ensure the safety benefits of FMVSS 213, Child Restraint Systems, are being realized.

FY 1995 Request

The request will provide funding for the agency's Compliance Test Program. This Program is critical to NHTSA's Priority Plan by ensuring that unsafe vehicles are identified and removed from our nation's highways. The Program is a critical component of effort to ensure safety on the nation's transportation system. The testing in this Program will provide oversight and surveillance of the new motor vehicle fleet to monitor compliance with the performance requirements of Federal motor vehicle safety standards. Compliance with the performance requirements will result in the on-the-road fleet providing the safety benefits associated with safety standards. Additionally, a rigorous Compliance Test Program encourages vehicle manufacturers to design vehicles with a large margin of safety compliance in order to ensure that when NHTSA tests the vehicle, the vehicle will meet the requirements of the standard. This further improves safety by exposing motor vehicle occupants to reduced safety risks.

The FY 1995 Vehicle Safety Compliance Test Program will include 20 tests for compliance verification to the requirements of the dynamic side impact protection standard and 30 tests for compliance verification to the requirements of several occupant crash protection standards. This will provide for an assessment of side and front impact crash protection performance across the spectrum of vehicles, including all sizes of passenger cars, vans, pickup trucks, and sport utility vehicles. The child safety seat and motorcycle helmet compliance test programs will continue to test all new seats and helmets in the marketplace to the requirements of the standards. The compliance test program will ensure that the safety benefits associated with the levels of performance established in the safety standards are being realized.

Accomplishments

- Since the inception of the National Traffic and Motor Vehicle Safety Act in September 1966, through December 1993, 3,299 investigations for possible noncompliance were initiated, of which 3,263 have been completed and closed.

- Between January 1, 1993 and December 31, 1993, a total of 44 compliance investigations were opened and 25 closed.

- Between January 1, 1993 and December 31, 1993, 24,741 vehicles and 587,552 items of equipment were recalled for noncompliance.

- During the period September 1966 through December 1993, 1,329 safety standard noncompliance recall campaigns were initiated, involving 9.9 million vehicles and 19.5 million equipment items. Of these, NHTSA influenced 541 recall campaigns involving 5.7 million vehicles and 17.3 million equipment items. Civil penalties collected for Safety Act violations total $3,734,250.

- During the period December 1985 through December 1993, NHTSA collected $264,148,075 in corporate average fuel economy (CAFE) fines for vehicles not meeting CAFE standards established for model years 1983 through 1992.

- The average dummy head injury measure obtained for air bag equipped vehicles in the FY 1993 compliance test program was a Head Injury Criterion (HIC) of 437. This is 56 percent lower than the level established in the standard. This demonstrates the effectiveness of compliance test oversight in increasing the margins of compliance with Federal vehicle standards, thereby improving actual on-the-road safety.

## ENFORCEMENT PROGRAM

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Defects Investigation | $2,163 | $3,038 | $3,038 |

### Program Objective

The Defects Investigation Program is a critical component of DOT's commitment to the safety of the nation's transportation system. The objective of this program is to identify and remove vehicles and items of motor vehicle equipment with safety-related defects from the nation's highways.

### Program Description

The Defects Investigation program seeks data from consumers on potential defects, performs tests and surveys on vehicles and vehicle equipment, and conducts detailed investigations to identify safety risks. When unreasonable safety risks are identified, efforts are initiated to obtain a safety recall from the manufacturer which will notify owners and ensure that required corrective actions are implemented before crashes, injuries, and deaths occur. The foundation for these investigations is data obtained from consumers. The program's Auto Safety Hotline provides requested highway safety information to consumers and obtains motor vehicle safety defect reports from consumers to assist the agency in initiating investigations. This program provides direct support to the Department's management objective of "Supporting the Safety of our Transportation Systems." The program removes unsafe vehicles from the road, thereby decreasing the fatality rate and reducing the number and severity of crashes and injuries, and associated health care costs. The Defects Investigation Program also supports the Administration's efforts to foster partnerships with consumers by maintaining the Hotline, which provides safety-related information on a wide range of motor vehicle subjects and gives the public a means of reporting safety defects to the agency.

Information provided to consumers increases awareness of highway safety as a public health issue and the information and education provided by the Hotline serves to modify behavior and attitudes about highway safety. Information provided by consumers supplies important data used by the agency in its Defects Investigation Program. The information leads to comprehensive defect investigations, including on-site vehicle inspections, owner surveys, laboratory testing, and detailed technical analyses, to determine whether a safety-related defect exists. If these activities support a conclusion that a safety defect exists, a manufacturer is requested to voluntarily conduct a safety recall. If a manufacturer declines and the facts warrant, NHTSA formally orders a recall campaign.

Program benefits include a reduction in the number of defective vehicles operating on the highways, associated reductions in the number of crashes and the number and severity of injuries in motor vehicle crashes, reductions in health care costs due to motor vehicle crashes, increased awareness by the manufacturers of their responsibilities to remedy defects, and increased public input and awareness of the potential existence of safety-related defects in their vehicles and items of motor vehicle equipment.

FY 1994 Program

During FY 1994, the Defects Investigation Program will expand the agency's capability to respond to the public's demand for information on highway safety and to consumer interest in reporting safety-related defects in motor vehicles and items of motor vehicle equipment. Consumer calls to the Hotline demonstrate that consumers are interested in participating in the process of identifying potential safety defects in motor vehicles and items of motor vehicle equipment. To heighten public awareness of the Hotline, NHTSA requested and received FY 1994 funding to improve its ability to receive and process consumer demand for highway safety information and to explore programs to reach more consumers in order to draw them into a "partnership" with the agency's defect investigatory process. The emphasis will be to provide more information about the Auto Safety Hotline to the public through the media, consumer groups, and motor vehicle related organizations.

The Defects Investigation Program will respond to the increasing consumer demand for information concerning highway safety, obtain and analyze motor vehicle defects reported to the agency from the public through the Hotline and from other sources, and conduct rigorous investigations to determine whether such reported defects are creating an unreasonable safety risk. These investigations will include extensive laboratory testing to identify, analyze, and assess potential safety problems in vehicles as they become increasingly more complex, particularly in terms of electronics, computer controls, and alternative materials. These investigations will also include field inspections on vehicles and items of motor vehicle equipment. This extensive testing and field inspection protocol will provide more expeditious and rigorous conclusions regarding the safety consequences of potential defects. It also will provide a foundation on which to base an assessment of unreasonable safety risk for use in determining whether a safety recall is warranted.

## FY 1995 Request

In FY 1995, the Defects Investigation Program will continue with efforts to expand the Hotline's capability to respond to the public's demand for information on highway safety, and activities to increase consumer reporting of possible safety-related defects in motor vehicles and items of motor vehicle equipment. Specifically, the Defects Investigation Program will respond to the increasing consumer demand for information concerning highway safety, obtain and analyze motor vehicle defects reported to the agency from the public through the Hotline and from other sources, and conduct rigorous investigations to determine whether such reported defects are creating an unreasonable safety risk. These investigations ($2.302 million) will include extensive laboratory testing in order to identify, analyze, and assess potential safety problems in vehicles as they become increasingly more complex, particularly in terms of electronics, computer controls, and alternative materials. In addition, the investigations will include field inspections of vehicles and items of equipment. This extensive testing and field inspection protocol will provide more expeditious and rigorous conclusions regarding the safety consequences of potential defects. It will also provide a foundation on which to base an assessment of unreasonable safety risk for use in determining whether a safety recall is warranted. Funding of $179 thousand is proposed for monitoring safety recall campaigns to ensure that the recall remedy is adequate and recall completion rates are maximized.

Consumer participation in the Auto Safety Hotline demonstrates that consumers are extremely interested in participating in the process of identifying potential safety defects in motor vehicles and items of motor vehicle equipment. NHTSA is requesting $557 thousand for the Hotline. The proposed funding will permit the agency to maintain its ability to provide motor vehicle safety information to the public and to continue the development of a "partnership" with consumers in order to obtain information on safety-related problems they experience with their motor vehicles or items of motor vehicle equipment. This will provide the American public with information and education regarding motor vehicle safety and the agency with an increased number of vehicle defect reports on which to base defect investigations. The result will be a more informed public with an enhanced awareness of highway safety, as well as an increase in defect reports to better define the scope and depth of a potential defect.

## Accomplishments

- From the inception of the National Traffic and Motor Vehicle Safety Act in September 1966, to December 31, 1993, 167.3 million vehicles have been recalled in 4,644 recall campaigns to correct safety defects. The Defect Investigation Program has directly influenced 725 recall campaigns involving 97 million vehicles.

- Between January 1, 1993 and December 31, 1993, a total of 132 defect investigations were opened and 131 closed.

- Between January 1, 1993 and December 31, 1993, seven recall campaigns, involving 337,175 vehicles, were conducted to remedy safety-related defects in safety belt systems. This helped to ensure that the safety benefits associated with the agency's priority program to increase safety belt use would be realized.

- Between January 1, 1993 and December 31, 1993, one recall campaign, involving over 78,000 child safety seats, was conducted to correct safety-related defects. These actions are consistent with the agency's belief that special efforts should be made to provide safe transportation to the future generation.

- Between January 1, 1993 and December 31, 1993, 10.5 million vehicles were recalled for safety defects, with 88 percent of this total influenced by NHTSA defect investigations.

## ENFORCEMENT PROGRAM

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Odometer Fraud | $100 | $-0- | $-0- |

### Program Objective

The objective of the program is to reduce odometer fraud by enforcing the Federal odometer laws and regulations through investigations for criminal prosecution and encouraging aggressive enforcement of State odometer laws.

### Program Description

Odometer fraud falsely increases the value of used cars and fraudulently costs consumers buying such cars between $3.3 billion and $4.1 billion, annually. Strong enforcement of the Federal and State odometer laws, i.e., prosecutions with stiff sentences, appears to be the most effective deterrent. Recognizing this, Congress enacted the Truth in Mileage Act of 1986 that upgraded violations of the Federal odometer law from a misdemeanor to a felony. Because the limited size of the Odometer Fraud Staff restricts NHTSA's ability to investigate all alleged violations, emphasis is placed on encouraging State agencies to enforce State laws and assisting them in their investigations.

The continuing program to deter odometer fraud includes the following:

- Investigating large-scale odometer fraud schemes for prosecution by the Department of Justice.

- Encouraging and assisting State enforcement agencies to aggressively enforce State odometer laws.

- Monitoring State motor vehicle titling systems for weaknesses that facilitate odometer fraud and encouraging procedures to correct these weaknesses.

- Increasing public awareness of odometer fraud and rights of consumers.

The goal is to reduce consumer fraud through an effective odometer enforcement program and an increase in consumer awareness.

FY 1994 Program

No funding was provided in FY 1994 for state grants.

FY 1995 Request

No funding is requested in FY 1995. The agency is currently conducting a study of the program and upon its completion a determination will be made regarding the future of the program.

Accomplishments

Since the inception of the odometer enforcement program in July 1978, through December 31, 1993:

- A total of 1,090 investigations involving 6,725 vehicles were completed which substantiated odometer violations, with 251 cases referred to the U.S. Department of Justice for prosecution; 214 cases referred to NHTSA Chief Counsel for civil penalties; and 190 cases referred to State enforcement agencies for legal action at that level. The results of the remainder of the investigations were provided to consumers for private civil actions. NHTSA cases were responsible for 165 criminal convictions in Federal courts with prison sentences ranging from one month to 14 years, and fines totaling $2.69 million.

Since the inception of the State Enforcement Support Contract program in 1989, through December 31, 1993:

- The following States have received contracts: Kansas, Washington, Mississippi, Georgia, Missouri, Connecticut, South Carolina, Utah, Pennsylvania, Oregon, New York, Maryland, Virginia, Florida, Colorado and Arkansas.
- State agencies which have received and completed contracts totaling $400,000, conducted 1,717 investigations, 13 statewide consumer awareness programs, and recovered $400,259 for defrauded consumers during contract period. Four contracts are still in progress.

# HIGHWAY SAFETY PROGRAM

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## HIGHWAY SAFETY PROGRAM

### Highlights Statement

This section of NHTSA's budget describes the activities which form the cornerstone of the national highway safety program. These activities provide the bridge between conducting research and demonstrating the effectiveness of new measures in operational environments and transition into permanent use in State and local programs. If a demonstration and evaluation confirm effectiveness, these new countermeasures are transferred to States and communities where they become candidates to be implemented statewide through the Section 402 State and Community Grant Program and other funding mechanisms.

The primary objective of NHTSA's highway safety program is to reduce crashes, prevent injuries and save lives, by improving human behavior. Motor vehicle crashes remain the number one cause of death for persons ages 5-32 and the leading cause of serious injury. Motor vehicle crashes are serious public health and economic problems. For example, motor vehicle crashes, injuries and fatalities cost U.S. society approximately $138 billion annually in medical costs, property damage, lost productivity and other direct costs. Alcohol-related crashes alone cost society $46 billion per year. The medical costs of motor vehicle injury are estimated to be over $14 billion annually. Nearly 30 percent of these costs, over $4 billion, is paid by Medicare and Medicaid.

Reductions in death and injury from motor vehicle crashes would help contain health care costs and reduce the tax load needed to support the government health care system, as well as reduce time lost from work, lower public assistance payments for injury victims and their families, and diminish personal suffering. About 70,000 lives have been saved over the past 10 years by reducing impaired driving and increasing safety belt use, saving over $50 billion in direct, out-of-pocket costs. For each life saved and associated injuries prevented, society saves $2.2 million. By making modest gains in highway safety, the tax savings alone are hundreds of millions of dollars.

Numerous studies of crash causation have shown that driver related factors account for 90 percent of these crashes. An effective highway safety program is key to reducing both crashes and costs. In fact, NHTSA's entire budget can be justified on the basis of tax savings and reductions in Medicare and Medicaid payments that result from the agency's highway safety programs.

Consistent with the FY 1994 budget request to Congress, NHTSA's FY 1995 Highway Safety Program budget is presented in five categories: Alcohol, Drug and State Programs; the National Occupant Protection Program; Enforcement and Emergency Services;

Highway Safety Research; and State Motor Vehicle Services. Each program area is justified in detail.

There are major new thrusts to the Highway Safety Program that cut across the five budget categories. These thrusts have become technologically mature and are now ready for further refinement, development, demonstration and implementation. It is expected that these new areas will constitute an increasingly important part of NHTSA's Highway Safety Program activities.

## Secretary's Goals

Secretary Peña has set two important traffic safety program goals for the nation: NHTSA will undertake programs to reduce alcohol-related fatalities to 43 percent and increase safety belt use to 75 percent by the end of 1996. In FY 1995, the agency will launch a new combined Impaired Driving/Occupant Protection Program (developed during FY 1994 in cooperation with the States and major highway safety organizations) to address these goals. At the heart of this new program will be three components: 1) public information and education (PI&E) to increase awareness and understanding of the need for concerted program action; 2) legislative program assistance to help States enact laws that can bring about significant and lasting changes in motorists' attitudes and behavior regarding impaired driving and seat belt usage; and 3) enforcement program strategies to ensure widespread public compliance with the laws. By combining the two programs, which have traditionally relied upon the same basic program strategies of persuasive education, sensible traffic laws, and strict enforcement of those laws, State and local governments will be able to make more efficient use of their scarce resources. Instead of conducting a special campaign to curb drunk driving one month and to increase belt use the next, the combined campaign will provide the basic framework, program strategies and materials for combining these efforts whenever and wherever possible.

## Speed Control

Exceeding posted speed limits and driving too fast for conditions represent continuing problems on our highways. In 1990, approximately 34 percent of all fatal crashes were speed-related. All speed-related crashes cost society in excess of $10 billion dollars per year. A 10 percent reduction in speed-related fatalities would result in saving approximately 1,500 lives per year and reducing societal costs by over $3 billion each year, when related injury reductions are also included. Studies have shown that travel speeds are steadily increasing. To address this problem, the agency will develop a far-reaching speed control and enforcement program. Funding for FY 1995 will permit a speed control demonstration project. Research programs will address the speed-related crash problem, effectiveness of efficient enforcement techniques and identification of dangerous driving behavior. A targeted public information and education campaign will be created utilizing new multimedia materials that explain the dangers of speed. Finally, a joint effort with the Federal Highway Administration (FHWA) will incorporate a multifaceted speed control and corridor safety program.

## Youth

Young drivers ages 15-20 continue to be over-represented in motor-vehicle crashes compared to the general driving population. In 1990, driver crash rates and fatality rates were higher for this age group than for all but the oldest drivers. While recent data indicate that drinking and driving have decreased for youth, drivers under 21 are still over-involved in alcohol-related crashes. In addition, safety belt use among this age group is lower than for the general public.

This program will focus on three overall complementary strategies: education and awareness; legislation and enforcement; and provisional licensing for young drivers. Education and awareness programs will be directed at youth in schools and the workplace. An awareness program will continue to be implemented for adolescents and pre-drivers focusing on the use of safety belts, and pedestrian and bicycle issues. Outreach to national organizations that serve this population will continue and expand, and student programs will continue to be developed. Materials and program strategies for underserved sub-populations will be developed and tested. Enforcement and legislation efforts will include zero alcohol tolerance for young drivers and promoting special enforcement techniques for young drivers. NHTSA will complete the provisional licensing demonstration project evaluation and will promote this program in the states. Safety belt information will be included in all law enforcement outreach efforts. Assistance will be available to help states in passing and upgrading laws such as zero tolerance and occupant protection laws.

## Older Drivers

Older driver traffic fatality rates, computed on the basis of miles travelled, rank second only to drivers 16-19 years old. The number of drivers over 70 will increase significantly by the year 2000.

Most older persons compensate to various degrees for the effects of aging, for example, by limiting their driving to situations in which they believe that they can drive safely. Part of NHTSA's program is to provide informative materials to aid these drivers in making appropriate decisions about limiting their driving. However, some older persons do not appropriately self-regulate their driving. To bring these persons to the attention of licensing agencies, NHTSA will provide guidelines to individuals in contact with them (e.g., family, physicians, and law enforcement officers) on how to refer them to the departments of motor vehicles in the States. NHTSA will also provide licensing agencies with improved performance assessment procedures in order to make sound licensing decisions.

## Pedestrian Safety

Pedestrian fatalities constitute about 16 percent of the annual traffic fatalities, or 5,801 fatalities. Economic costs to society due to pedestrian fatalities are estimated at $4 billion. Fatal crash data consistently show 36 percent of fatally injured pedestrians impaired at a blood-alcohol content (BAC) of 0.10 percent or higher, and an additional 6 percent with a positive BAC reading. A new initiative will begin addressing the alcohol impaired pedestrian, based upon strategies and countermeasures developed in a research program which ends in late FY 1994. Older adults ages 65 and over, while comprising 12 percent of the country's population, account for 9 percent of the total pedestrian crashes but 22 percent of the fatalities. As a group, older adults are three times more likely to be killed in a pedestrian crash than an adult in the 20-64 age group. Two demonstration programs aimed at improving older adult pedestrian safety will be initiated in large cities with a large elderly population.

## Records and Licensing

Improved systems of traffic records and driver licensing are crucial to planning safety programs, measuring program performance relative to reduced fatal and injury crashes, and dealing with problem drivers. States should utilize the latest hardware and software technologies in data collection and analysis to ensure that highway safety program decisions are based on the most accurate, current and available data, resulting in the most efficient and effective use of scarce resources. State licensing and judicial officials should use the best data and the latest knowledge and procedures for identifying and sanctioning repeat offenders, and for sanctioning and counselling young and older offenders. Further, ISTEA specifically calls for improved state data systems as part of its Safety Management System provisions, linked data and more uniform data reporting.

The goal of this program is to assist the states in upgrading their records systems through improved planning, technical assistance, demonstrations and the use of the latest hardware and software technology for accident and emergency medical data reporting and use. We will continue to promote state provisional licensing programs for novice drivers. We also will work with the states to implement the latest practices and procedures in dealing with the older driver, with full consideration for safety and continuing mobility.

## HIGHWAY SAFETY PROGRAM

### Summary of Budget Requirements

| | FY 1994 Appropriation | FY 1995 Request | Increase (+) or Decrease (-) |
|---|---|---|---|
| | | (Dollars in Thousands) | |
| **Positions:** | 208 | 208 | 0 |
| **Use of Funds:** | | | |
| Salaries & Expenses | $14,968 | $15,550 | +$582 |
| Operating Expenses | 2,344 | 2,661 | +317 |
| Contract Program | 23,162 | 22,328 | -834 |
| Total, Hwy. Safety | 40,474 | 40,539 | 65 |
| **Source of Funds:** | | | |
| O&R Trust | 34,431 | 34,381 | -50 |
| Grant Administration | 6,043 | 6,158 | 115 |
| Total, Hwy. Safety | 40,474 | 40,539 | 65 |

## HIGHWAY SAFETY PROGRAM
## Contract Program Summary

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| ALCOHOL, DRUG & STATE PGMS. | | | |
| Alcohol Program | $4,219 | $6,125 | $6,767 |
| Drug Evaluation & Classification | 2,800 | 2,800 | 1,530 |
| Pedestrian & Bicycles | 385 | 428 | 594 |
| Motorcycle Programs | 393 | 350 | 345 |
| Subtotal, Alc., Drug & State | 7,797 | 9,703 | 9,236 |
| NATL. OCCUPANT PROTECTION PGMS. | | | |
| Public Information & Education | 2,101 | 2,101 | 2,213 |
| Belt Law Compliance | 1,282 | 1,282 | 1,704 |
| Target Population Ed. | 1,300 | 1,325 | 1,321 |
| Evaluation & Technology Sharing | 404 | 404 | 451 |
| Subtotal, National Occupant Protection | 5,087 | 5,112 | 5,689 |
| ENFORCEMENT & EMERGENCY SVCS. | | | |
| Police Traffic Serv. | 1,203 | 1,225 | 1,209 |
| Emergency Med. Serv. | 1,543 | 614 | 769 |
| Subtotal, Enforcement & EMS | 2,746 | 1,839 | 1,978 |
| HIGHWAY SAFETY RESEARCH | | | |
| Alcohol & Drugs | 2,245 | 2,262 | 2,006 |
| Occupant Protection | 972 | 972 | 670 |
| Older Driver Research | 496 | 500 | 444 |
| Pedestrian & Bicyclist | 258 | 258 | 355 |
| Speed & Unsafe Driving | 376 | 376 | 620 |
| Subtotal Hwy. Saf. Res. | 4,347 | 4,368 | 4,095 |
| STATE MOTOR VEHICLE SERVICES | | | |
| Records & Licensing | 238 | 1,140 | 1,330 |
| Hwy. Saf. Information Management Sys. | 500 | 0 | 0 |
| Model Accounting Record Sys. | 1,000 | 1,000 | 0 |
| Subtotal, State Motor Vehicle Services | 1,738 | 2,140 | 1,330 |
| JACKSON MEMORIAL | 2,250 | 0 | 0 |
| TOTAL: | 23,965 | 23,162 | 22,328 |

## ALCOHOL, DRUG AND STATE PROGRAMS

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Alcohol Program | $4,219 | $6,125 | $6,767 |

### Program Objective

The Alcohol Program's objective is to reduce substantially the number of alcohol-related traffic crashes, injuries, and fatalities. In 1992, alcohol-related crashes killed 17,699 people, injured one million more, and cost society $46 billion.

NHTSA has made substantial progress over the past decade. The 17,699 deaths in 1992 are down from 22,084 in 1990 and 25,170 in 1982. Alcohol was involved in 46 percent of fatal crashes in 1992, down from 50 percent in 1990 and 57 percent in 1982. If alcohol were still involved at the 1982 level, more than 3,500 additional persons would have died on the nation's highways in 1992, and highway crash costs would have been $8.9 billion greater.

The Secretary has challenged NHTSA to reduce alcohol-related fatalities even further, to 43 percent by the end of 1996, at the same time that we raise safety belt use to 75 percent nationwide. The alcohol goal alone will save an additional 2,300 lives and $5.8 billion annually. The goal will not be easy to meet: our programs must increasingly reach high-risk drinking drivers while maintaining the gains made to date. NHTSA's comprehensive alcohol-belt program follows a sound, research-based program to achieve this goal.

### Program Description

Our alcohol program is based on two fundamental strategies, information-education and laws-enforcement-sanctions, that are designed to work together. Data show that strict laws that are well-publicized, enforced effectively by police, and backed up by meaningful sanctions, reduce alcohol-related casualties. Our programs support (1) easily-understood laws prohibiting alcohol-impaired driving (such as .08 BAC), (2) effective enforcement that detects impaired drivers and is visible to the public (such as checkpoints), (3) swift and sure sanctions for impaired drivers (with increasingly severe sanctions for repeat offenders), and (4) effective publicity for impaired driving laws, enforcement, and sanctions.

Information-education programs use public health strategies to encourage safe, healthy behavior. Our programs include activities to: (1) influence public attitudes about drinking and driving; (2) assess whether impaired-driving offenders have alcohol-use problems and refer them to appropriate treatment; (3) encourage alcohol servers to be responsible for their patrons through server training programs; and (4) encourage employers to promote healthy and safe driving behavior through worksite programs.

Our new initiatives expand upon these fundamental strategies in two ways. First, we are combining alcohol and safety belt activities, both enforcement and education, wherever feasible. Many states and communities already have used and strongly support combined programs for their synergistic effects and economies of scale. In addition, combined programs will keep the Secretary's two goals continually at the fore. Second, we will use peer-to-peer spokespersons to inform, advocate, and support our programs, especially alcohol and belt law enforcement. Our recent safety belt campaign showed clearly how effective these peer-to-peer contacts are in spreading our programs throughout the country.

## FY 1994 Program

In FY 1994 we will continue our basic strategy with two special emphases: youth and special populations. While drinking and driving has decreased even faster for youth than for adults, drivers under 21 are still over-involved in alcohol-related crashes. Extensive evidence demonstrates that both alcohol sale and drinking-driving laws are not well enforced for youth. We will complete a model youth community alcohol program demonstration in Washington, D.C. and will document and evaluate the program for use by other communities. We will conduct workshops to train local police in effective methods of enforcing laws prohibiting underage drinking and driving. We will develop worksite traffic safety programs and policies for younger workers through NETS, our public-private coalition. And we will develop public information especially targeted to youth, using media approaches that appeal to them ($1,285 thousand).

As impaired driving crashes decrease overall, we must carefully target our programs to address over-represented, hard-to-reach and culturally diverse populations. Hispanics, the fastest growing population in the U.S., have DWI arrest rates much higher than those of the general population. Seventy-five percent of Native American drivers killed in crashes had been drinking. In FY 1994 we will form partnerships with three ethnic and cultural organizations to address drinking and driving. We will combine our knowledge of traffic safety with their knowledge of the specific groups to develop pilot programs arising from the groups' real problems and needs using their own advice on strategies ($600 thousand).

At the same time, we will continue our base program to maintain the gains we have made. To improve impaired driving enforcement we will complete development of an in-vehicle video taping course for police. We will use our FY 1992-FY 1993 Harvard study research results to focus our Ad Council alcohol safety messages and direct them to specific high risk target audiences. We will continue to provide public relations assistance to the States to support their individual impaired driving programs. Our cooperative corporate education program, NETS, will expand to over 1,000 companies and will be largely self-sufficient. We will continue our use of the sports personalities and television time donated through Techniques for Effective Alcohol Management (TEAM), our coalition with sports leagues, facilities, and media, to reach millions of young males and other sports fans each year with increasingly effective messages. We will continue technical assistance and training for judges and prosecutors through the National Traffic Law Center at the National District Attorneys Association. And we will develop a model DWI tracking system to assist the courts in effectively managing impaired driving offenders. In all areas, we will combine our efforts with safety belt use education and enforcement whenever practical ($4,240 thousand).

### FY 1995 Request

Our FY 1995 program will extend the FY 1994 strategies by fully implementing our combined alcohol and safety belt program, by using peer-to-peer spokespersons to spread the program, and by increasing our activities targeted to special populations. Approximately 10 states will receive funds for a peer-to-peer spokesperson to promote alcohol and belt programs, especially enforcement activities, to elected officials in urban areas. This program, modeled after the very successful Operation Buckle Down police spokespersons, is needed to overcome the problems states face in selling traffic safety programs to large cities. We will conduct workshops for the states to present the latest research on effective strategies for reaching diverse cultural populations -- Native American, African American, Hispanic, and Asian American -- and to showcase successful state and community programs. We will continue our partnerships with cultural groups to develop complete targeted traffic safety programs with these groups ($1,110 thousand).

We will continue our FY 1994 youth emphasis by completing and evaluating the state provisional licensing demonstration, encouraging states to close loopholes in their alcohol sale and purchase laws for minors, and assisting them in enforcing these laws effectively. We will promote the model community youth alcohol program based on the results of the Washington area demonstration. Through NETS (Network of Employers for Traffic Safety) we will implement worksite traffic safety programs directed especially at youth not attending college. We will pay special attention to inner-city youth. We will work closely with the Departments of Justice, Education, and Health and Human Services in these activities ($1,370 thousand).

We will continue to assist states in passing priority alcohol laws, including administrative license revocation, .08 BAC for adults, and zero tolerance for youth. We will demonstrate the validity of Standardized Field Sobriety Testing methods at BAC levels below 0.10, further evaluate the effects of zero tolerance laws for youth, assess and evaluate the impact of community service sanctions for DWI and demonstrate newly-validated screening instruments for detecting problem drinkers who should be referred to alcohol treatment. We will complete a statewide demonstration of effective sobriety checkpoints. We will continue information, technical assistance, and training for judges and prosecutors to implement recommendations of Traffic Safety Summit II ($1,965 thousand).

We will continue our public information activities through Ad Council, TEAM, and Drunk and Drugged Driving Awareness Month. Each of these collaborative programs, with public and private sector organizations, multiplies our resources many times. We will continue to work cooperatively with MADD and other citizen traffic safety groups. We also will continue limited data collection on impaired drivers involved in both fatal and non-fatal crashes, to provide the knowledge base needed for even greater impaired driving reductions ($1,922 thousand).

Through a cooperative effort with the National Center for Health Statistics, we will complete a study on fatal crashes involving impaired drivers. This will provide data on which to build our next generation of alcohol countermeasures. Finally, we will begin to identify, assess, and evaluate the potential highway safety benefits of "smart card" technology for driver licenses, which may allow up-to-date and accurate licensing information to be instantly available to police at roadside ($400 thousand).

Accomplishments

- Continued successful public information campaigns through the Ad Council and TEAM.
- Conducted the annual National Drunk and Drugged Driving (3D) Prevention Month campaign. Distributed 60,000 copies of the Program Planner to states, communities, and organizations.
- Completed a model state DWI tracking system.
- Implemented Youth Enforcement Workshops in more than 10 states, to train police management in effective underage drinking and driving law enforcement strategies.

- Developed and implemented model criminal justice system programs in several communities to address the enforcement of underage drinking and impaired driving laws as they impact the entire system.

- Began pilot program development to address impaired driving issues in diverse populations.

- Delivered Standardized Field Sobriety Testing (SFST) training to 4,875 officers, a 150 percent increase over 1992.

- Supported legislative activities in 1993 resulting in the passage of Administrative License Revocation laws in 4 States, .08 BAC in 5 States, and zero tolerance for youth laws in 4 States.

## ALCOHOL, DRUG AND STATE PROGRAMS

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Drug Evaluation and Classification Program | $2,800 | $2,800 | $1,530 |

### Program Objective

The program objective is to reduce the incidence of drug-impaired driving through four broad activities. First, we assist States and communities in establishing Drug Evaluation and Classification (DEC) programs that train police officers to identify drivers who are impaired by drugs other than alcohol. Second, we train prosecutors and judges so that offenders are prosecuted and appropriately sanctioned. Further, we deter drug-impaired driving through a national public information and education campaign that warns of the dangers of drug-impaired driving and advertises that specially trained police officers will detect and apprehend offenders. Fourth, we develop new technology for evaluating suspected drug-impaired drivers quickly and accurately, and we continually re-evaluate and refine the drug evaluation procedures to make them more effective and efficient.

### Program Description

The DEC process is a standardized and systematic means of examining a suspected impaired driver to determine: (a) whether the suspect is impaired; if so, (b) whether the impairment is drug related; and if so, (c) the broad categories of drugs likely to have caused the impairment. The evidence developed during the DEC evaluation is used to prosecute and sanction drugged drivers. For this aspect of the program, training for law enforcement officers and prosecutors has been key. Our major goal has been to establish DEC training programs as quickly as practical in as many States as possible. Currently, programs are underway in 24 States and the District of Columbia. By the end of FY 1994, our plan projects the program to be operational in 27 States. To accomplish this, NHTSA provides instructors and materials for conducting the training.

Evaluation is a key component of the program. NHTSA is evaluating the DEC process in an effort to improve the techniques used to make it more efficient for the police officer to detect offenders and enhance the prosecution of drugged drivers. The success of program sites is being studied so that the reasons for success can be shared with other sites and built into new programs.

## FY 1994 Program

In FY 1994 we will complete cooperative research with NIDA to validate and simplify DEC examination procedures. We also will complete our evaluation of new technological methods that promise to detect drug presence quickly and economically in drivers who appear to be impaired. We will continue training judges and prosecutors in DEC sites, to support police arrests of drug-impaired drivers. We will continue national-level publicity on driving under the influence of drugs ($1,905 thousand).

During FY 1994, responsibility for managing the DEC training program will be fully transferred to the NHTSA regional offices, as authorized in Section 2006 of ISTEA. In addition, a major research program to validate DEC procedures and streamline the DEC investigation will be completed. DEC regional training funds will be used for state grants to support institutionalization of DEC in state agencies and transition to state funding for management of DEC operations. As the DEC program expands in each state, the state will gradually take on full responsibility for its operation and NHTSA funding will decrease ($895 thousand).

## FY 1995 Request

FY 1995 marks a major change in the DEC program. Through FY 1994, substantial NHTSA funding was needed to assist states in implementing their DEC programs. By FY 1995, this period of rapid expansion into new states will end. Most states with high drug-impaired driver populations will have established DEC programs. Many states will be completely self-sufficient; the remainder need relatively minor federal assistance.

The DEC program can now be supported fully with a budget of $1.53 million, a reduction of $1.27 million from the FY 1994 appropriation. These funds will continue program support as identified below.

We will provide funding for regional technical support to those States that are in their final year of reaching self-sufficiency, and to support opportunities for the DEC State coordinators to meet regionally to discuss program implementation and resource issues. We will continue prosecutor and judge training in DEC sites and will continue national-level public information to warn the public about the dangers of driving under the influence of legal or illegal drugs. We will complete an extensive checkpoint demonstration to detect drivers impaired by drugs or alcohol ($830 thousand).

In a new initiative, we will conduct legal research to identify and document legal obstacles to convicting drug-impaired drivers. This research will determine whether a full DEC evaluation is needed if a driver's driving behavior provides reasonable suspicion of impairment and if a chemical test confirms the presence of an impairing drug. We will develop and pilot test a revised training program for drug recognition experts based on completed research validating and simplifying the DEC procedures. Curricula materials developed as a result of this effort will be made available to the states through existing DEC programs within the states ($450 thousand).

We will pilot test and evaluate a screening instrument for drug-impaired drivers to identify if they should be referred for treatment in addition to their sanctions for their impaired driving conviction ($250 thousand).

Accomplishments

- As of December 1993, 24 states and the District of Columbia have implemented DEC programs in 300 law enforcement agencies. Approximately 650 DEC instructors and 3,500 Drug Recognition Experts (DREs) have been trained.
- Completed a Phase I of a major study using human subjects to evaluate the predictive validity of each of the DEC evaluation's major components. Used the results to begin developing a simplified, shorter, and more easily learned DEC evaluation procedure for police.
- Provided public information and education regarding the dangers of drugged-driving, and the DEC program to television, radio, and print media.
- Implemented the DEC Regional Coordinator Program to provide regionalized technical support and training coordination directly to the states.

## ALCOHOL, DRUG AND STATE PROGRAMS

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Pedestrians and Bicycles | $385 | $428 | $594 |

### Program Objective

The basic program objectives are to reduce pedestrian and bicyclist casualties by increasing the number of jurisdictions that include pedestrian and bicycle safety activities in their traffic safety programs. Special objectives are to reduce the number of impaired pedestrian casualties; improve the safety of elderly pedestrians through environmental and behavioral programs; and to increase the usage of bicycle helmets through a national usage campaign.

### Program Description

Pedestrian and bicycle fatalities constitute about 16 percent of the annual traffic fatalities or 6,642 fatalities. Economic costs to society due to pedestrian fatalities are estimated at $4.7 billion. Fatal crash data consistently show 36 percent of fatally injured pedestrians impaired with BACs of 0.10 percent or higher and an additional 6 percent with some positive BAC reading. A new initiative will begin addressing the alcohol impaired pedestrian. This program also supports joint NHTSA/FHWA efforts to help states and communities develop and implement effective pedestrian safety programs. With regard to bicycle programs, research shows that 75 percent of all bicycle crashes involve head injuries and that bicycle helmets are 85 percent effective in mitigating these injuries.

### FY 1994 Program

Recent Section 402 rulemaking added pedestrian and bicycle safety as a national priority area. In FY 1994, NHTSA will package and distribute results from pedestrian and bicycle research completed in FY 1993 ($100 thousand). The agency will continue joint programs with FHWA to aid jurisdictions in implementing research-based pedestrian countermeasures ($128 thousand). FHWA and NHTSA will demonstrate the effectiveness of a model program for elderly pedestrians, based on FY 1993 research results ($100 thousand). Pedestrian and bicycle Problem Identification Program (PIP) training will be provided to a number of states and communities. Development will begin on an education program for underserved populations. Also a pedestrian training demonstration program for elementary school bus riders, based on research to be completed in FY 1993, will be conducted ($100 thousand).

FY 1995 Request

One new initiative will be launched in the FY 1995 program. It will involve three demonstration projects to reduce the incidence of impaired pedestrian crash casualties for groups that have shown a high incidence of impairment in crashes ($241 thousand). This initiative will be based upon strategies and countermeasures developed in a research program which ends in late FY 1994. The joint NHTSA/FHWA pedestrian safety program to promote the community-based "Walk Alert" concept will begin its third year ($128 thousand). In addition, two demonstration programs aimed at improving older adult pedestrian safety will be initiated--each in large cities with a large elderly population ($100 thousand). Also in this year's program will be a series of Regional/state technology transfer workshops ($75 thousand). Key issues such as the Pedzone project, school bus safety, the alcohol/pedestrian program, Walk Alert, Walking-through-the-Years, the PIP data base program, and use of community programs as delivery systems will be addressed in these workshops. FY 1995 will also be the second year of a three-year program to promote bicycle helmet usage ($50 thousand).

Accomplishments

- Completed major revisions to the "Walk Alert" pedestrian safety program manual. Joined with AAA, FHWA and the National Safety Council to promote this effective safety program.
- In conjunction with the CPSC, developed a bicycle safety hang tag to be displayed on new bicycles. One manufacturer includes the tag on each bicycle shipped.
- Began a three-year program with the National Little League to reduce bicycle and pedestrian injuries to players and coaches. Will reach 2.5 million players and one million adult volunteers.
- Developed a pedestrian strategies manual to assist police departments in addressing pedestrian safety issues.
- Developed a NHTSA/FHWA pedestrian safety resource kit containing information on behavioral and engineering aspects of pedestrian safety and intended for local safety programs managers, traffic planners, and other safety professionals.

- Published a bicycle helmet campaign resource manual to assist communities in planning and implementing bicycle helmet promotion campaigns or to upgrade existing bicycle programs.

## ALCOHOL, DRUG AND STATE PROGRAMS

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Motorcycles | $393 | $350 | $345 |

### Program Objective

The basic program objective is to reduce motorcyclist casualties by increasing the number of motorcyclists who are properly licensed and who wear motorcycle helmets. A new emphasis is to reduce the incidence of impaired motorcyclists.

### Program Description

Motorcycle fatalities constitute about 7 percent of the annual traffic fatalities, or 2,808 fatalities. Economic costs to society due to motorcycle fatalities are estimated at $2 billion. Forty-two percent of fatally-injured motorcyclists are either unlicensed or improperly licensed.

NHTSA will provide technical assistance to support states in their efforts to pass universal motorcycle helmet use laws. In states without helmet laws, NHTSA will conduct helmet use promotions in cooperation with motorcycle manufacturers and dealers and with safety and rider organizations.

With the enactment of recent universal helmet laws, large numbers of fake or novelty helmets are being sold to riders who oppose motorcycle helmet laws. These helmets dilute the safety benefits of helmet laws and they encourage challenges to such laws. This program aims to identify unsafe helmets.

### FY 1994 Program

The use of motorcycle helmets is the most effective known countermeasure for reducing motorcyclist fatalities. Universal helmet use laws (i.e., those that cover all riders, regardless of age), result in nearly 100 percent compliance. In FY 1994, the agency will continue to support state efforts to enact universal helmet laws by providing technical assistance and information to counter opponent arguments ($100 thousand). In addition, efforts will be made to increase voluntary helmet use in states without helmet use laws. The agency also will support educational efforts with dealers, licensing agencies, and motorcycle organizations to reduce the number of unlicensed motorcyclists involved in traffic crashes ($100 thousand) and to improve impaired operator detection ($150 thousand).

## FY 1995 Request

FY 1995 will mark the second year of a three-year program designed to reduce the number of unlicensed or improperly licensed motorcyclists by improving enforcement and registration and by providing information to motorcycle dealers and organizations to encourage cyclists to become properly licensed ($100 thousand).

The FY 1995 program will address the problem posed by the use of unsafe helmets by providing information regarding the results of helmet tests, training programs for police to identify unsafe helmets, and information for consumers to help them identify such helmets ($100 thousand).

The agency will also initiate a new three-year campaign to reduce fatalities involving alcohol-impaired motorcyclists ($145 thousand). Currently, more than 50 percent of motorcycle fatalities involve alcohol-impaired cyclists. The campaign will be based upon public information and enforcement strategies developed in FY 1993 and FY 1994.

Funding will be used to address four major areas in motorcycle safety: (1) a national campaign to address the impaired motorcyclists; (2) the second year of a three-year program to reduce the number of unlicensed and improperly licensed motorcyclists; (3) technical assistance to support states in their efforts to enact universal motorcycle helmet use laws; and (4) testing, educational and regulatory efforts to reduce the growing use of fake or novelty motorcycle helmets.

## Accomplishments

- Technical information and assistance has been provided to six states (Oregon, Nebraska, Washington, Texas, California, and Maryland), each of which enacted a law requiring all motorcyclists to wear helmets.
- Despite increased exposure, motorcycle fatalities have decreased by 54 percent since 1980. Although motorcycle registrations decreased by 14 percent since 1975, vehicle miles travelled have increased by 70 percent.
- A training program has been developed to help police officers identify alcohol-impaired motorcyclists.
- A prototype training program has been developed to assist police officers in identifying motorcycle helmets that do not meet Federal Motor Vehicle Safety Standard 218.
- A resource kit has been developed and distributed which contains materials covering all areas of motorcycle safety.

## NATIONAL OCCUPANT PROTECTION PROGRAM

### PROGRAM SUMMARY

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| National Occupant Protection Program | $5,087 | $5,112 | $5,689 |

### Program Objective

Increasing the use of safety belts and child safety seats is one of the most effective means available for reducing deaths and serious injuries resulting from traffic crashes. Although much progress was made from 1985 to 1990, national belt use remained below 50 percent. Most nations with belt use laws had use rates averaging 70-90 percent. NHTSA's research, demonstrations and monitoring of foreign and domestic programs indicated that publicized enforcement was the missing link. As of 1990, few states had mounted significant efforts to enforce occupant protection laws, even fewer publicized such enforcement efforts.

The National "70% by '92" Program, initiated by NHTSA in 1991, emphasized highly publicized enforcement, accompanied by statewide media programs, peer-to-peer enforcement outreach, and efforts to upgrade state laws. These programs resulted in an increase in the national use rate to 66 percent by the end of 1993, preventing more than 5,000 deaths and 90,000 moderate-to-serious injuries annually.

The FY 1995 program will continue to use this effective approach to achieve the Secretary's goal of increasing seat belt use to 75 percent by 1997. It will support periodic, highly visible enforcement efforts. The national public information campaign will be tailored to support this program. Peer-to-peer outreach will be expanded. Underserved populations will be targeted and efforts will continue to upgrade existing laws.

### Program Description

The Occupant Protection Program consists of four major components: Public Information and Education; Belt Law Compliance; Target Population Education; and Evaluation and Technology Sharing. Each activity is described in detail on the following pages.

## NATIONAL OCCUPANT PROTECTION PROGRAM

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Public Information and Education | $2,101 | $2,101 | $2,213 |

### Program Objective

The aim of this program component is to generate widespread support for seat belt and child safety seat law enforcement efforts and to increase safety belt awareness in mainstream populations and in non-user populations in underserved areas. To sustain the current safety belt use levels and provide for further increases, it will be necessary to keep the public informed about law enforcement efforts and provide reminders about the importance of "full-time" safety belt use.

### Program Description

Public information and education is a key element in the combined DWI/BELTS emphasis program, begun in FY 1994 in response to the Secretary's goals to increase safety belt usage and to reduce alcohol-impaired driving. In moving toward these two national goals, the agency will develop enforcement-related and general awareness media materials. This will be done in the context of a "four seasons" approach whereby safety messages are targeted for each of the four seasons. Messages also will be developed for those areas of the country where usage levels are well below the national average and where research indicates there are special information needs.

### FY 1994 Program

This will mark initial implementation of the combined DWI/BELTS campaign. A mass media effort conducted in cooperation with the Advertising Council will publicize public health and enforcement related aspects of the campaign ($600 thousand). In addition, a new multi-year effort will be initiated to provide supplemental media and marketing materials for reaching populations in low-use areas with the combined campaign ($600 thousand). There will be an expansion of public relations and coalition-building activity to increase public awareness, particularly of issues such as the need to wear seat belts, even in air bag-equipped vehicles and the need to support the efforts of law enforcement to increase seat belt and child seat use ($425 thousand). Finally, support will be provided for special media and promotional events, such as National Child Passenger Safety Week and Buckle Up America Week activities ($476 thousand).

FY 1995 Request

This will mark the first year of full-implementation of the combined DWI/BELTS program. The agency will continue its cooperative agreement with the Advertising Council to produce campaign materials which address the public health benefits and enforcement-related aspects of increasing seat belt and child seat usage and to address air bag-related issues ($600 thousand). Supplemental media and marketing materials will continue to be produced to support state and local media efforts and to reach low-use groups ($568 thousand). Coalition and public relations efforts ($545 thousand) and national media events and activities ($500 thousand) will also be continued to support the combined DWI/BELTS effort. In each of these areas of activity, new materials will be developed and events conducted which reinforce state and local efforts to address the dual problems of low seat belt and child seat use and the involvement of alcohol in fatal and injury-producing crashes.

Accomplishments

- Enforcement-related media materials were developed in support of state efforts to increase seat belt usage. Among these materials were the "Seat Belts. They Only Work When You Wear Them" campaign and a first-time enforcement-related public service announcement featuring Vince and Larry.
- Over 60,000 copies of Occupant Protection Idea Sampler were distributed to state and local planners with ideas for conducting and publicizing law enforcement blitzes and other activities within the four seasons framework.
- A Four Seasons Planner was developed in cooperation with the National Safety Belt Coalition containing ideas for media campaigns and special events to reinforce the "buckle up" message throughout the year.
- Public information materials were developed through the Ad Council and under separate contract to publicize the importance of buckling up with air bags and other advice on how to reap maximum benefits from air bag technology.
- A new version of the Emergency Rescue Guidelines for Air Bag-Equipped Cars was produced to include data on MY 1992-94 vehicles and was distributed to first responders across the U.S. (police, fire and emergency rescue personnel).
- A new brochure on child passenger safety was developed (with an initial printing of 700,000 copies) that included thelatest information on proper usage, such as where to place a rear-facing infant restraint in a car equipped with a passenger-side air bag.

## NATIONAL OCCUPANT PROTECTION PROGRAM

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Belt Law Compliance | $1,282 | $1,282 | $1,704 |

### Program Objective

Increasing the national seat belt use rate to 75 percent by the end of 1996 is one of the Secretary's primary goals for highway safety. Years of research and demonstrations, combined with successful agency efforts in recent years, have shown that additional highly publicized enforcement will be necessary to achieve this objective. Only where enforcement efforts are publicized are usage rates above 70 percent achieved. Upgraded laws will also be required and support will be provided for states to improve both seat belt and child passenger safety laws. Because states with primary enforcement laws have higher usage rates than those with secondary enforcement laws, upgrades to primary enforcement will be supported. Local officials must be made aware of the potential for increasing seat belt use and for decreasing alcohol-related crashes through intense, blitz-like, enforcement and public education campaigns. This will require additional demonstrations of successful programs and it will require better outreach to inform local leaders. Additional demonstrations of enforcement blitzes will be conducted and an outreach program modeled after the very successful Operation Buckle Down initiative will help states influence local officials that combined DWI/BELTS enforcement blitzes will increase belt use and decrease crashes.

### Program Description

The real-world benefits of increased belt law compliance achieved in several states will be documented and packaged to assist other states in their program planning. New approaches for strengthening belt use laws will be pursued. Beginning in FY 1995, assistance will be provided to states to conduct combined DWI/BELTS blitz demonstrations. Results will be documented for consideration by other states. Upgraded training programs and information materials for law officers, judges and prosecutors will be developed, and support will be provided for information distribution and program promotion (e.g., the National Chiefs' Challenge Program) through organizations such as the International Association of Chiefs of Police and the National Sheriff's Association. State grants will be awarded to support peer-to-peer outreach activities with local officials. Through this outreach program, elected officials of larger urban areas will receive the information they need, face-to-face, to show that these combined blitzes can provide significant benefits for their communities.

FY 1994 Program

The agency will encourage states to upgrade seat belt and child passenger safety laws, and to enforce these laws. State and local results from participation in the 1991-1992 National Safety Belt Program will be packaged and distributed to legislators and law enforcement officials, documenting how belt usage rose nationally from about 50 percent to more than 60 percent ($167 thousand). Information with which to plan and conduct combined DWI/BELTS blitz demonstrations will be developed for FY 1995 implementation. Occupant protection law enforcement training for police executives and line officers will be continued ($340 thousand). Funding support for statewide enforcement demonstration projects will be continued ($775 thousand).

FY 1995 Request

Maintaining the FY 1994 funding level for STEP demonstrations ($775 thousand) will enable the gathering of additional demonstration program information to help states in their enforcement program planning. It will support ten state grants to conduct peer-to-peer spokesperson programs to promote belt use programs and state-level training efforts ($480 thousand). Information to assist in encouraging state law upgrades will be updated and distributed and training programs and materials for law enforcement, judges and prosecutors will be developed ($449 thousand).

Accomplishments

- The 1992 National Chiefs' Challenge program was completed and 148 law enforcement agencies from across the country competed for recognition by conducting programs to increase seat belt use. An awards ceremony was held in May 1993.
- Initial results from an evaluation of the California primary enforcement law showed seat belt use increases of 10-20 percentage points in six test communities.
- An awards program was developed to reward organizations and jurisdictions achieving 70 percent PLUS. 80 percent PLUS and 90 percent PLUS seat belt use rates. This three-tiered program replaces the original "70 percent PLUS" awards program.

- All states have been solicited to propose practical methods for conducting closely-coordinated and highly publicized enforcement programs to increase the use of occupant protection devices.
- North Carolina has been identified to demonstrate the effectiveness of a selective traffic enforcement program approach (STEP) to increase child restraint use.

## NATIONAL OCCUPANT PROTECTION PROGRAM

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Target Populations | $1,300 | $1,325 | $1,321 |

### Program Objective

Although the national seat belt usage rate has reached more than 60 percent, there are many sub-groups of the population which do not frequently use their safety belts. Some of these groups, such as young male drivers, have much higher crash rates than the average driver. The objective of the Target Populations Program is to increase the use of safety belts and child safety seats among high-risk, underserved, and culturally diverse groups, as well as among the mainstream population. These groups include parents and care givers of young children; youth; and rural, inner-city, low income, and culturally diverse groups. Delivery channels must be expanded to include the public and private sectors, medical groups, law enforcement, youth advocate agencies, intergovernmental, and other groups with the potential to reach and influence a large number of part-time and non-users.

### Program Description

To achieve the goal of 75 percent belt use (and reduce alcohol-related fatalities by the end of 1996), the agency must maintain the gains made over the past two years while simultaneously moving beyond the current strategies and messages aimed at the general driving population. The program builds on the successes of recent years and focuses on strategies aimed at reaching youthful, culturally diverse and low-use groups, identified through research and data analysis.

National organizations that interact with these populations will be urged to expand their involvement in educating constituents about the importance of seat belt use (and the problems of drunk driving). These organizations will provide for the development and delivery of effective targeted program strategies. Activities include training and workshops, demonstrating new strategies for high-risk populations, and developing educational materials for use with targeted constituents.

### FY 1994 Program

In FY 1994, this program will seek to maintain the recent gains in seat belt usage while including alcohol-related messages and reaching out to new populations. NHTSA will develop and pilot test program strategies and materials designed to increase belt use by the part-time user and other low use groups through national organizations that interact with targeted segments of the population ($600 thousand).

Program efforts will emphasize the need for upgraded laws and support for enhanced enforcement efforts. Strategies and material development will reflect the results of data analysis and research. Training and workshops will be conducted for local child passenger safety advocates, police officers, EMS personnel, pediatricians and other health care professionals ($600 thousand). Efforts will be made to generate increased public and private sector support for belt initiatives through employer-based programs and the National Safety Belt Coalition ($125 thousand).

Information developed for this outreach program will reference technological developments that affect occupant protection, including air bag equipped cars and the use of lap belts, as well as the need for proper placement of infant rear-facing car seats. In addition, new program materials will carry combined DWI/BELTS safety messages for selected populations while other program materials will combine pedestrian, bicycle and child passenger safety issues and messages.

FY 1995 Request

Awards will be made to approximately ten national organizations that interact with identified target populations. Program strategies, materials and messages will be developed, tested, evaluated, and disseminated ($626 thousand). Expanded youth and child safety seat programs, which incorporate both educational and enforcement strategies, will be developed and implemented ($590 thousand). Child passenger safety advocacy workshops and target population workshops will be offered to the States. Program materials for use by elected and appointed officials will support a peer-to-peer education program in urban areas. Efforts will be expanded with the medical community to reach patients and involve them in activities to upgrade laws and support law enforcement. Assistance will be provided to the private sector to educate employees and clients ($105 thousand).

Accomplishments

- Initiated a peer-to-peer program with pediatricians to encourage expanded pediatrician involvement in education programs and law enforcement support.
- Expanded National Safety Belt Coalition membership and enhanced member program activity.
- Developed training program for law enforcement officers and EMS personnel.

- Developed an education program with the Little League to provide educational messages to ball players and adult volunteers.
- Initiated targeted traffic safety programs to develop culturally diverse program materials and pilot program strategies for a variety of diverse populations including Hispanics, American Indians, and African Americans.
- Initiated and delivered an educational program on child safety seats and safety belts for medical practioners and law enforcement through targeted television networks.

## NATIONAL OCCUPANT PROTECTION PROGRAM

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Evaluation Assistance/ Technology Sharing | $404 | $404 | $451 |

### Program Objective

The primary objective of this element is to provide States and localities with program materials and technical assistance to increase seat belt usage rates, and measure progress toward one of the agency's most important goals, increasing usage to 75 percent by the end of 1996.

### Program Description

The agency supports technology sharing by responding to individual requests for program information and materials, by distributing bulk quantities of program materials for use in local safety programs, and by providing logistical support for technical symposia and conferences where the research and program results can be shared. To facilitate this process, states and localities will be invited to submit media materials, technical reports, program descriptions or any other materials of potential interest and value to others. NHTSA will publish a catalog annually that provides information on how to order the materials from the originator.

Usage survey design assistance will be provided to states. In this way, the agency helps to ensure that state surveys are accurate and representative and can be combined with usage estimates from other States to produce a national estimate of safety belt usage. These state and national estimates are the primary means by which program officials at all levels measure progress toward the goal of achieving 75 percent belt usage.

NHTSA will continue to provide technical assistance to states requesting help in performing an overall assessment of occupant protection program activities.

### FY 1994 Program

This will mark the first (partial) year of the combined DWI/BELTS campaign addressing the twin goals of reducing the alcohol-related proportion of fatalities from 46 to 43 percent, and increasing the seat belt usage rate to 75 percent by the end of 1996. The agency will produce bulk quantities of program materials to support this new combined emphasis program

($150 thousand). A new multi-year contract will be awarded to handle materials distribution ($200 thousand). The Materials Inventory and Control System (MICS) will be modernized to take full advantage of the latest computer technology and survey design assistance will be provided ($54 thousand).

FY 1995 Request

The agency will respond to requests from State, local, and private sector organizations for materials to support program planning and implementation. Initial distributions of program materials such as the Occupant Protection Idea Sampler, or public information materials such as Vince and Larry Public Service Announcements (PSAs), typically generate numerous requests for additional quantities to fulfill local program needs. The agency will provide materials in requested quantities or, for very large requests, will provide reproducible negatives to State Highway Safety Offices, local program organizers and employers ($400 thousand).

Usage survey design assistance will be continued ($51 thousand). Technical assistance will also be provided to States asking for help in performing statewide Occupant Protection Program Assessments. NHTSA will organize teams of program implementation and evaluation experts who assess program strengths and weaknesses, and formulate recommendations for program action tailored to local conditions and resources.

Accomplishments

- Usage survey design assistance was provided to 10 States, and almost 30 States conducted annual probability-based surveys in accordance with the DOT Survey Guidelines.

- Filled orders for over 900 requests per month for occupant protection educational materials received from individuals, educational institutions, employers, and others.

- A new system for sharing and distributing safety belt media campaign materials was pilot tested. States previewed and ordered up to four different sets of materials. Several thousand broadcast quality copies of television and radio PSAs, and over 600,000 copies of flyers, posters and ad slicks were distributed.

- Specifications were completed for a new multi-year program materials distribution capability with contract award scheduled for late FY 1994.

- Support was provided for 50 media events in conjunction with State occupant protection program initiatives.

## ENFORCEMENT AND EMERGENCY SERVICES

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Police Traffic Services (PTS) | $1,203 | $1,225 | $1,209 |

### Program Objective

Concerns with violent crimes and drugs have greatly increased the demands for police services, often resulting in a lack of emphasis on traffic law enforcement. The overall objective of PTS is to incorporate traffic safety and enforcement into an agency's comprehensive enforcement strategy. Further, the program efforts are to expand and increase traffic enforcement's effectiveness and efficiency in reducing motor vehicle crashes, injuries and deaths.

Speed (defined by the agency as exceeding the posted speed limits or driving too fast for conditions) continues to receive priority attention from NHTSA. In 1990, approximately 34 percent of all fatal crashes were speed-related, based on data from the 1990 Fatal Accident Reporting System. Of all crashes reported to the police, about 12 percent cited speed as a contributing factor. These speed-related crashes cost society, according to NHTSA's General Estimates System, in excess of $10 billion dollars per year. A 10 percent reduction in speed related fatalities would save approximately 1,500 lives and reduce societal costs by $3 billion annually (including the cost savings from injury reductions).

### Program Description

The focus of the police traffic services program is to integrate traffic safety into law enforcement agencies' overall enforcement program by introducing innovative and effective initiatives. The PTS program is focused in five major areas: working with and assisting national organizations, assessing advanced enforcement technology, producing public information and education, conducting demonstration projects and providing technical assistance to law enforcement leaders.

Enforcement programs combating the alcohol and drugged-impaired driver and increasing the use of occupant restraints are included in the Alcohol, Drug and State Programs and the National Occupant Protection Program budget requests. The Highway Safety Research request addresses research programs dealing with speed related crash problems, the effectiveness of efficient enforcement techniques and the identification of dangerous driving behavior.

This research effort will also analyze crash data for speed involvement, collect data from near crash events to determine how speed contributes to hazardous driving situations, as well as identify specific population groups most likely to speed and using specific unsafe behavior patterns.

FY 1994 Program

The FY 1994 program objective is to reduce crashes and to increase traffic enforcement. Efforts to improve effectiveness, efficiency and productivity with limited available resources will be emphasized. In summary, the program efforts are combined into four program activities, with an emphasis on speed, to address traffic enforcement and to support law enforcement. These four program activities include: work with national law enforcement organizations ($255 thousand); transfer of new technology ($290 thousand); production of public information and education materials and training ($250 thousand); conduct of traffic enforcement demonstration projects ($290 thousand); and support for technical assistance and training ($140 thousand).

The highlights of the FY 1994 program activities are: initiation of a municipal speed enforcement demonstration project; continue to conduct statewide PTS assessments and provide technical assistance to implement recommendations; development of a curriculum for police use of laser speed measuring devices; support of the NHTSA/FHWA commercial vehicle traffic enforcement and speed control programs; development of a workshop for smaller police agencies on how to work with the media on traffic safety issues; and, providing technical assistance to law enforcement.

FY 1995 Request

NHTSA will increase speed related program emphasis, which includes expanding enforcement activities. A project will be conducted with a municipal law enforcement agency to develop effective speed enforcement countermeasures. PTS will demonstrate the integration of traffic safety into agencies' overall enforcement program. PTS will also continue to field test applications of new and innovative technology that can be used for traffic enforcement. A joint project between NHTSA and FHWA will deal with speed control/corridor safety ($338 thousand).

NHTSA will continue providing assistance to law enforcement through national organizations, including the International Association of Chiefs of Police (IACP), National Sheriffs' Association and others to promote traffic enforcement. PTS will conduct a workshop for law enforcement leaders to assess the changes confronting traffic enforcement into the 21st century. PTS will provide technical assistance on implementation of the National Maximum Speed Limit (NMSL) compliance and monitoring rule; continue state assessments using teams of national experts to review a state's police traffic services program; and, continue to provide technical assistance for the Sheriff's Rural Traffic Enforcement initiative ($244 thousand).

PTS will complete training programs for laser speed measuring devices; continue to assess technology that can improve enforcement effectiveness and efficiency; continue the testing program for speed measurement devices, including upgrading university test laboratories for lasers; and, conduct, in cooperation with the Department of Justice, an assesment of the national law enforcement accreditation standards with particular consideration of the traffic enforcement standards ($240 thousand).

To be most effective, speed enforcement efforts must be supported with the use of targeted public information and education materials. New multimedia public service announcements that explain the dangers of speed will be produced and distributed as part of the speed control program ($200 thousand).

NHTSA, in cooperation with the National Institute of Standards and Technology and the IACP, will support the speed measurement devices testing and technical assistance program. This program will help provide the high quality and accuracy of speed measuring devices used by law enforcement agencies. Also, support will be given to training efforts for local police such as workshops on working with the media on traffic safety issues, including speed, impaired driving, occupant protection and other serious traffic violations; and, the use of in-car video. PTS will continue support for state assessment recommendation activities ($187 thousand).

Accomplishments

- Formulated innovative "Drugs That Impair" section for the Standardized Field Sobriety Testing curriculum and had the curriculum adopted as the national standard.

- Completed model minimum specifications and testing protocols for laser speed measuring devices.

- Upgraded two testing laboratories to test laser devices.

- Developed training for use of laser speed measuring devices.

- Provided technical assistance on traffic enforcement to Motor Carrier Safety Assistance Program agencies within FHWA.

- Updated police traffic services standards for the Commission on Accreditation for Law Enforcement Agencies.
- Developed a curriculum and presented Law Enforcement Public Information Workshops.

## EMERGENCY MEDICAL SERVICES

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Emergency Medical Services | $1,543 | $614 | $769 |

### Program Objective

The mission of Emergency Medical Services (EMS) is to reduce death, disability and resulting health costs from highway crashes by enhancing EMS systems, particularly in rural areas. Most of NHTSA's activities focus on preventing crashes from occurring and on minimizing the injuries that result from crashes. But, when crashes do occur and people are injured, EMS becomes an essential component of the highway safety effort, for the purpose of ensuring prompt and effective care of highway crash victims.

According to NHTSA's estimates, each fatality prevented may save $700 thousand in costs to society. Nearly 30 percent of the first year medical costs resulting from motor vehicle injuries are paid by tax dollars. Even greater savings could result from preventing long-term injuries. EMS professionals continue to serve as strong advocates for highway safety injury prevention initiatives, particularly in rural areas. The following objectives are aimed at this goal: to improve State EMS systems; to conduct demonstrations involving new programs and emerging technologies in rural areas, including those with large Native American populations; to revise EMT (Emergency Medical Technician) national standard curricula; to implement statewide prehospital data systems and promote linkage with other data bases; to improve EMS communications; and to provide public information and education materials on EMS.

NHTSA's leadership in EMS has been instrumental in coordination among Federal agencies and working collaboratively to provide technical assistance to State EMS programs. We will continue our joint efforts with other Federal agencies to provide technical assistance to states, and will initiate discussions with the Department of Health and Human Services to update our interagency agreement to clarify roles and responsibilities for EMS programs.

### Program Description

The largest portion of traffic fatalities occur in rural counties. The single most common characteristic rural residents share is the distance between them, and that distance can stack the odds against rural EMS providers. Well supplied, trained, and medically directed prehospital providers, as well as rapid transport to the right medical care, can lessen those odds. Unfortunately, rural EMS systems often lack these resources, and the problems they encounter need special attention. Specific problems that complicate delivery of EMS in rural areas include: large geographic areas covered by ambulance services; infrequency with which severe medical emergencies are encountered; long distances over which patients must be transported; lack of high technology medical facilities; and large seasonal changes in populations in rural resort areas.

In an effort to improve rural EMS systems, NHTSA initiated a rural preventable mortality study to identify where, in the continuum of care, patients were dying. The study found that 17 percent of the motor vehicle deaths reviewed could have been prevented. Considering only the hospital deaths, as previous studies have done, the rate was 32 percent. Additional studies will be completed in FY 1994 to confirm these results. A demonstration project will be initiated (using the results of these studies) to provide strategies for improving rural EMS systems nationwide. The results of this project and the Bystander Care demonstrations conducted in FY 1994, will be used as models for other States.

From our statewide EMS technical assessments we know that states lack: effective training programs for prehospital providers; public information and education programs; standardized prehospital data collection and reporting, efficient communications systems; and comprehensive trauma systems. Our projects will focus on these findings including: revisions to the national standard curricula which serve as national guidelines; technical assistance to states and communities on public information and education for EMS; encouraging EMS professionals to continue their highway injury prevention activities; expertise and guidance on prehospital data collection and evaluation (including linkage); technical assistance on statewide communications planning; and continuation of NHTSA's *Development of Trauma Systems* workshops.

### FY 1994 Program

Major activities planned in FY 1994 are technical assistance to the States to implement recommendations from the statewide technical assessments and complete assessments in the remaining states ($259 thousand). The agency will complete two additional rural preventable mortality studies; support demonstration projects of the Bystander Care program; provide national leadership in identifying and defining uniform prehospital data elements for evaluation; continue liaison activities with the Bureau of Indian Affairs and Indian Health Service to assess EMS systems serving Native American populations; and continue partnerships with other Federal agencies to provide technical assistance to states ($230 thousand). The EMT-Basic National

Standard Curriculum will be completed, and revisions will be initiated for the First Responder program (police, fire, and EMS) ($125 thousand).

## FY 1995 Request

NHTSA's EMS program efforts will focus on improving EMS systems serving rural areas, including Native American populations. A rural demonstration project will be initiated based on the results of the additional rural preventable mortality studies completed in FY 1994. In addition, states will be encouraged to implement the bystander care program using state demonstrations to be conducted in FY 1994 as models. NHTSA has learned a great deal from our statewide EMS assessments which we will use to structure our technical assistance to states and communities. NHTSA will continue to provide national expertise and guidance to states on educating the public on how and when to access EMS, and what to do until help arrives. The communications structure must be in place to allow the public to access EMS through a central number, such as 911. Technical expertise will be provided to states to assist in communications planning and implementation of new FCC requirements. NHTSA will also provide technical assistance to states to improve prehospital data collection to enable states to link statewide data bases (police crash reports, prehospital run reports, and hospital discharge reports) to provide valuable injury and cost data to evaluate the effectiveness of highway safety programs ($525 thousand).

As the recognized national leader in developing the EMT National Standard Curricula, NHTSA will continue our revisions of curricula and initiate the update to advanced levels of EMT training. In addition, the EMT Dispatcher, First Responder, and Ambulance Driver Training will be completed and we will encourage State adoption of each. It is essential that prehospital providers remain up-to-date with new medical and educational technologies, particularly in rural areas. We will assess the need to provide curricula in other languages to serve diverse populations ($244 thousand).

## Accomplishments

- Completed EMS Assessments in 40 states and *Development of Trauma Systems (DOTS)* seminars in 21 states.
- Developed and promoted "Make The Right Call" PI&E campaign in English and Spanish.
- Facilitated assessment of Indian Health Services' EMS program.

- Completed National Standard Curriculum on Bystander Care.
- Convened national conference to develop uniform prehospital EMS data elements.

## HIGHWAY SAFETY RESEARCH

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Alcohol and Drugs | $2,245 | $2,262 | $2,006 |

### Program Objective

The primary objective of the alcohol and drug research program is to develop and test methods and programs for reducing impaired driving. In the drug area, research is focused on determining which drugs are the most hazardous so that state/local programs can be focused on these drugs, and on developing procedures to help police identify drug-impaired drivers.

### Program Description

Alcohol remains a major highway safety problem area. Other drugs such as marijuana and cocaine, when combined with alcohol and other drugs, may also significantly increase crash risk. Solving the safety problem posed by driving under the influence of alcohol and drugs is clearly an agency priority. The states have the responsibility of implementing programs that will reduce alcohol and drug impaired driving. However, programs for accomplishing this may not exist, and for existing programs, information regarding cost effectiveness is often lacking. Given this situation, states and localities look to the Federal government for help in obtaining the information they need to effectively deal with the impaired driving problem. No single program or approach will solve the nation's drunk and drugged driving problem. Instead, different methods must work together, including deterrence through enforcement and publicity of driving while intoxicated (DWI) and driving under the influence of drugs (DUID) laws, treatment of problem drinkers and drug abusers, education and voluntary actions that citizens can take to prevent impaired driving by themselves and others because they consider it improper and unacceptable, and programs to provide transportation alternatives to impaired driving. NHTSA's research supports development and evaluation of programs in all these areas.

Also, because the nature and magnitude of the drug problem is not fully understood, NHTSA research supports laboratory, simulator, controlled on-road, and crash research to collect the information needed to relate dosage to driving impairment.

FY 1994 Program

Research continued on target groups to more specifically define at-risk groups of drinker-drivers in order to develop improved countermeasures ($590 thousand). Work on tracking changes in the public's attitudes and behaviors is also continued ($93 thousand). Work was initiated to determine the relative crash risk of drivers on the road with various BACs ($637 thousand). Work continued to develop strategies which support the .08 BAC limit ( e.g, identification procedures which police officers can use to detect drivers on the road and at roadside with BACs below .10), and on other enforcement, adjudication, and education programs ($322 thousand). Research in the drug program continued with crash studies and controlled field test studies to determine the effects of various drugs ($434 thousand). Testing also continued on both alcohol test devices and on drug non-invasive test devices ($186 thousand).

FY 1995 Request

In the alcohol safety area, data show that only a minority of the driving age population exposes itself to risk of drinking and driving. New programs to generate future reductions in DWI will be directed at, and based on an understanding of, the groups that constitute this population at risk ($650 thousand). Several states have lowered their BAC limits to .08 per se, and more are expected to do so in the near future. Research will continue on developing improved strategies for implementing and enforcing the .08 BAC laws ($150 thousand). Work will also continue to determine the most promising sanctioning programs for repeat DWI offenders ($167 thousand). New work will concentrate on the development of improved police DWI enforcement procedures (e.g, on patrol and at checkpoints ($639 thousand). Problems in the adjudication of DWI offenders sometimes permits violators to avoid conviction and/or the implementation of sanctions. Work will begin on the identification of problems and solutions regarding the adjudication of DWI offenders ($200 thousand).

With respect to drugs other than alcohol, current research has shown that drugs are found much less frequently in fatally injured drivers than alcohol. When drugs are found, they are usually found in combination with alcohol or other drugs. There are data available which indicate that, in these situations, drugs may increase crash risk. Therefore, more narrowly focused (and less expensive) programs for dealing with drug-impaired driving appear warranted. In FY 1995, research to develop and test these types of programs (e.g., modified suspect interrogation and behavioral test procedures, use of non-invasive drug screening devices, etc.) will be continued ($50 thousand). New work will identify visual cues which police can use prior to and after a driver has been stopped ($25 thousand). Research will also be initiated to determine an individual's motivations to drive after taking drugs, and what would be required to change their attitudes and behavior ($125 thousand).

Accomplishments

- "Incidence and Role of Drugs in Fatally Injured Drivers."
- "The Detection of DWI Motorcyclists" report, brochure, and accompanying video.
- "Driving Under the Influence: A Report to Congress on Alcohol Limits."
- "Assessment of Impoundment and Forfeiture Laws for Drivers Convicted of DWI: Phase I Report."
- Breath Alcohol Ignition Interlock Device model specifications.
- "Proposed Model Specifications for Alcohol Screening Devices"
- "Marijuana Effects on Actual Driving Performance"

## HIGHWAY SAFETY RESEARCH

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Occupant Protection | $972 | $972 | $670 |

### Program Objective

The objective of this research program is to identify and test strategies and methods for increasing levels of use and correct use of occupant-protection systems and devices among specific subpopulations of the general public, particularly the young. Program strategies include informing and educating members of specific population subgroups; encouraging police agencies to enforce occupant protection laws more vigorously; and assisting state and community agencies and organizations to adopt promotional programs.

### Program Description

The major direction of the research program in occupant protection in recent years has been to identify those population subgroups that are using belts and child safety seats least frequently and develop group-specific strategies for increasing their frequency of use. This work applies methods used in the private sector to develop product-marketing strategies (geo-demographic database, focus-group discussions, surveys of the American public) to "selling" safety. Most recently, work has focused on youthful drivers and passengers. Not only do young drivers use safety belts at lower rates than other drivers, they are among the most likely to engage in other high-risk driving actions, thereby resulting in over-representation in crash and fatality statistics. Getting these groups to increase their use levels will be more difficult than the earlier gains in use rates, but the payoffs should be greater.

### FY 1994 Program

The FY 1994 research program focuses on developing methods and procedures for law enforcement to get occupant protection laws enforced more widely and more efficiently. The program expands on the marketing techniques we developed in prior years to reach new problem audiences, particularly drivers ages 16 to 21. Special approaches for this age group include integrating a two-phase driver education program with provisional licensing for young drivers, developing an understanding of the situations in which teens do and do not wear belts, and gaining greater understanding of risk taking generally.

## FY 1995 Request

The entire FY 1995 budget supports the continuation of work to identify problem populations ($670 thousand).

## Accomplishments

- Completed two long-term studies of methods to improve enforcement of occupant protection laws for both children and adults.

- Completed study of gender differences in perception of safety messages and their implications for future programs addressing gender-specific audiences.

- Produced detailed geo-demographic analyses of State populations for four States to assist in developing targeted safety programs.

- Conducted a workshop, attended by nationally recognized specialists on driver education, youth, and risk taking, on training requirements for reducing risky behaviors of younger drivers.

## HIGHWAY SAFETY RESEARCH

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Older Drivers | $496 | $500 | $444 |

### Program Objective

The objective of the Older Driver research program is to improve the safety and mobility of older roadway users through implementing the research agenda described in the agency's revised Traffic Safety Plan for Older Persons, published in 1988 and revised in 1993. This plan includes the development of a variety of methods for determining which older drivers pose a threat to the public safety (and which do not) and assisting older drivers to make appropriate choices regarding the circumstances under which they continue to drive or seek alternative transportation. In addition to law enforcement and driver licensing agencies, potential intervenors include family members, physicians, and occupational therapists.

### Program Description

The Older Driver research program implements the revised (March 1993) NHTSA Traffic Safety Plan for Older Persons, which is directed toward increasing the safety and mobility of older road users. The behavioral research program has two major elements: assisting those older drivers who are able make appropriate decisions regarding situations in which they can continue to drive safely; and assisting States' departments of motor vehicles (DMVs) to identify and regulate the driving of those who drive unsafely. The FY 1993 budget initiated development of procedures for assessing drivers who have been reported to DMVs as problem drivers. This year's efforts concentrate on developing methods for improving procedures for notifying DMVs about individual problem drivers by those who are in the best position to know of the problems: physicians and family members or friends. The results of this work will be incorporated into a series of guidelines for physicians, law-enforcement officers, and family members, and the development of training programs for older drivers.

### FY 1994 Program

The FY 1994 budget supports the development of procedures for DMVs to assess driving performance of older drivers and the initiation of a study to develop methods to identify older drivers who do not appropriately regulate their driving ($400 thousand). Another new project, to be coordinated with the

Federal Transit Administration and the Administration on Aging, will determine what happens to an older person's mobility when they stop driving, identifying needs for and availability of other transportation modes to meet their mobility needs ($100 thousand).

## FY 1995 Request

The FY 1995 budget funds the conclusion of a study to understand the consequences of losing driving privileges, especially in regard to the availability and use of alternative transportation modes ($98 thousand). We will initiate studies to identify obstacles encountered by physicians and family members or friends when notifying DMVs about older drivers who have experienced problems. These studies will develop procedures to overcome these obstacles ($198 thousand). Another project will use the results of previous work to develop specific procedures for negotiating intersections that will permit older drivers to perform more safely in this threatening environment ($148 thousand).

## Accomplishments

- Submitted a report to Congress titled: "Addressing the Safety Issues Related to Younger and Older Drivers: the Research Agenda of the National Highway Traffic Safety Administration."

- Revised and submitted to Congress the Agency's Traffic Safety Plan for Older Persons.

- Published a collection of position papers authored by nationally recognized geriatric researchers summarizing the state of the art and describing needed research regarding the safety and mobility of older road users.

# HIGHWAY SAFETY RESEARCH

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Pedestrians & Bicyclists | $258 | $258 | $355 |

## Program Objective

The primary objective of the pedestrian/bicyclist research program is to develop cost-effective countermeasures for use by states and localities in reducing pedestrian/bicycle accidents and injuries.

## Program Description

Pedestrian and bicyclist fatalities account for about 16 percent of all highway related deaths each year with a total societal cost estimated to be $4.7 billion annually. In some large U.S. cities, 50 percent or more of the highway fatalities are pedestrians. Research has shown these accident areas to be complex with multiple factors contributing to the crashes. The identification of crash types by NHTSA has been a major step in improving our understanding of how these crashes happen and what can be done to prevent them. Using the crash types as targets, research focuses on the development of countermeasures in the areas of public safety information, model regulations, and safety training. Work done in conjunction with the Federal Highway Administration broadens the countermeasure approaches to include signing, traffic signals, and other environmental aides. The current focus is on preventing crashes involving older pedestrians, including those who are impaired by alcohol. States and localities with limited resources for safety activities can focus on applying solutions when the basic work of problem identification, countermeasure development and testing is done at the federal level.

## FY 1994 Program

Work continued on the development of a campaign to raise the level of awareness about pedestrian and bicyclist safety problems for both the public and for professional groups having responsibilities in these safety areas. Evaluation of the PEDZONE project in conjunction with FHWA continued during this period ($50 thousand). Finally, research was initiated on developing countermeasures in the bicyclist crash area ($111 thousand).

## FY 1995 Request

A portion of the requested FY 1995 funding will be used to complete countermeasure development work already underway ($120 thousand). Specifically, the program continues evaluation of the joint NHTSA/FHWA "PEDZONE" project, where sections of a city (zones) having high numbers of older (65+) pedestrian crashes are identified and treated with an appropriate mix of behavioral and engineering countermeasures. In its final year, the PEDZONE project will provide localities with a complete program of pedestrian protection for older persons. Also being funded and completed in this time period will be bicyclist crash countermeasures in the form of public service announcements and print media ads. Identifying the nature and magnitude of pedestrian and/or bicyclist crash problems is an important first step in the prevention process at the local level. In FY 1995, we will review the operational experience of a Problem Identification Program software package for pedestrian and bicyclist crashes that was made available earlier to localities, and make whatever revisions are required to improve its usefulness and performance ($75 thousand). In addition, we will initiate the development of a training module to instruct community traffic safety program (CTSP) coordinators on the crash problems and safety programs in the pedestrian and bicyclist areas ($23 thousand). Finally, a new initiative in FY 1995 will examine the magnitude of the alcohol-pedestrian problem in other target groups, e.g., Hispanic, rural, Native American populations ($137 thousand). Prior research has identified alcohol impairment as a factor in 35-45 percent of adult pedestrian fatalities. This estimate may differ when specific target groups are desegregated. The proposed research will examine available crash data to determine the magnitude of the problem in selected ethnic groups.

## Accomplishments

- "Walking Through The Years," a safety package for older pedestrians, including the report "Development of Safety Information Materials and Media Plans for Elderly Pedestrians."
- Developed Safe Crossing Program, a variety of media resource materials encompassing pedestrian safety messages for use at the local level.
- "Pedestrian and Bicyclist Safety: A Review of Key Program and Countermeasure Developments During the 1980's."

## HIGHWAY SAFETY RESEARCH

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Speed & Unsafe Driving Actions | $376 | $376 | $620 |

### Program Objective

The primary objectives of the Speed and Unsafe Driving Actions Research program are to determine the nature and magnitude of the crash problem associated with the major unsafe driving behaviors, and to develop and evaluate programs designed to reduce these behaviors.

### Program Description

Excessive speeding has been a major highway safety problem for many years, and is an Agency priority. Other unsafe driving behaviors (e.g., running a stop sign or traffic light) are on the increase and are also becoming major highway safety problems. However, little is known about the nature of the crash problem associated with these behaviors and what can be done to reduce these crashes. States and communities look to NHTSA for this type of information so that they can effectively combat these unsafe behaviors. Research in this area focuses on determining the degree to which unsafe driving behaviors that are under the voluntary control of the driver contribute to crash causation, and on determining under what circumstances (i.e., when and where) behaviors such as speeding are most likely to increase crash risk and who is practicing these behaviors. In addition, research is also directed at the development and evaluation of programs (e.g., enforcement, adjudication, public information, education, etc.) designed to reduce the occurrence of these behaviors in situations that lead to increased crash risk.

### FY 1994 Program

Work continued on field testing undetectable speed enforcement procedures (e.g., laser and radar). For the crash study that determines the nature and magnitude of the highway safety problem associated with speed and other unsafe behaviors, methodology was developed and a pilot test completed.

### FY 1995 Request

The development of effective countermeasures to reduce driver behaviors thought to be responsible for crashes has been only partially successful because we have little knowledge of the nature of the specific behaviors that are actually hazardous, the specific conditions accompanying these behaviors, and the types of, and perceptions of, drivers who perform them. A study involving crash investigations will continue to identify the nature and extent of the crash problem associated with speed and other unsafe behaviors ($420 thousand). Nationwide surveys will be initiated to determine what motivates the public to commit the unsafe behaviors ($100 thousand). Research will continue on speed enforcement technology (e.g., laser and radar) ($100 thousand).

Accomplishments

o Completed evaluation of effectiveness of combined enforcement strategies that focus on speed, alcohol, and safety belts.

## STATE MOTOR VEHICLE SERVICES

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Records and Licensing | $238 | $1,140 | $1,330 |

### Program Objective

The objective of the Traffic Records and Driver Licensing program is to support and assist States in improving traffic records and driver licensing systems and to establish more uniform practices throughout the country. A good traffic records system is necessary for State and community managers to identify highway safety problems, implement effective countermeasures, and evaluate their results. A good licensing system is necessary to grant licenses only to qualified drivers and to identify problem drivers in order to take appropriate action. Improved driver licensing programs are necessary to address older and entry level driver safety through non-prejudicial methods that identify drivers with poor driving records, or with physical and mental limitations and to determine how these drivers should be treated to maximize their safety and mobility.

### Program Description

NHTSA's role is to provide national leadership in records and licensing to increase both safety and mobility. Our goal is to improve state record systems' completeness, accuracy, timeliness, consistency, and usefulness; and to improve State driver licensing practices and procedures for dealing with problem drivers. To do this, we (1) continuously monitor and assess State activities, with emphasis on identifying noteworthy uses of new technology and practices, (2) develop, demonstrate and implement new technology and practices and promote their use, (3) provide grants and other support to assist States in upgrading their records and licensing systems, and (4) provide technical assistance through workshops, seminars, publications, information dissemination, and direct consultation. For example, results of two major NHTSA traffic records demonstration projects currently underway in New Jersey and North Carolina will form the basis of much of our future technology transfer efforts relative to latest computer hardware and software technologies. These projects are demonstrating current technology in personal computer (PC) use for data collection and transmission by enforcement and emergency medical services personnel, use of Global Positioning System (GPS) and Geographic Information System (GIS) technology, and means by which local agencies can provide data input and directly access State data files.

FY 1994 Program

Start-up funds are being requested in FY 1994 (by both NHTSA and FHWA) for a new program to provide planning assistance to States that are contemplating major upgrades of their traffic records systems. States will upgrade their traffic records systems to comply with the requirements for a Safety Management System (SMS), to implement the CADRE uniform data elements provisions, and to enhance their ability to monitor their highway safety program performance by better tracking their traffic fatality and injury crashes. Up to 10 implementation grants will be awarded to States that have demonstrated a commitment to upgrading their records systems. These funds will be used to determine the changes needed in the State systems to meet SMS and CADRE provisions and to develop detailed plans for implementing these changes ($700 thousand).

We will begin a major demonstration of a State older driver licensing program. We will conduct personal computer (PC) workshops and begin a demonstration of PC use for police agency accident reporting and data transmission. We will continue to support provisional licensing programs in the States, improved driver licensing examiner training (including older driver screening and counseling), promote the exchange of uniform violation and conviction information between the States through the Non-Resident Violator and Driver Licensing Compacts, and use of the D-20 Data Element Dictionary ($440 thousand).

FY 1995 Request

At the requested budget level, we estimate that up to 10 additional States (over those funded in FY 1994) can receive traffic record implementation grants. These grants, which will be jointly funded with FHWA, will be awarded to States that have demonstrated commitments to upgrade their record-keeping systems. Because of the enormous costs of system upgrades in traffic records, NHTSA cannot make any meaningful contribution to the actual hardware changes needed. Rather, our resources are better spent in helping the States determine what changes are needed to meet the multiple requirements for records established under the provisions of the Intermodal Surface Transportation Efficiency Act (ISTEA), and to improve their ability to monitor traffic safety problems, trends and performance in fatality and injury crashes. The requested budget also will support a review and synthesis of the results of the 1994 implementation grants ($800 thousand).

With FHWA we will develop traffic records guidance for data collection and use relative to SMS development and management. Results of the FY 1994 implementation grants will provide significant input to the development of this SMS guidance. We also will work with FHWA to begin an inventory of available public-domain software used by various State and local agencies for data management and analysis. This will assist States and communities seeking to improve or replace their software systems. We also will provide technical assistance to the States by advising on application of new technology for data collection, transmission and analysis ($230 thousand).

NHTSA will complete and evaluate the older driver licensing demonstration program begun in FY 1994 and will begin disseminating its results to the States. We will continue to promote state provisional licensing programs, improve driver license examiner training, encourage states to participate in the Non-Resident Violator and Driver License Compact to improve the exchange of violation, licensing and driver records data between the states, and assist state record uniformity through the ANSI D-20 Data Element Dictionary ($300 thousand).

Accomplishments

- Funded and provided oversight for the traffic record demonstrations in New Jersey and North Carolina that use the latest personal computer technology for data collection and transmission and apply Global Positioning System (GPS) technology for accurate crash location.
- Completed assessments of status of State implementation of CADRE in all 50 States.
- Initiated a major demonstration of an improved State older driver licensing program, including various restricted licensing provisions and counseling on voluntary driving restrictions, alternative transportation, and other available community services.
- Continued to assist States in reviewing and improving their traffic records systems through individual State traffic records assessments.
- Sponsored personal computer workshops for State and local police and emergency medical service agencies. Implemented a limited demonstration of hand-held, pen-based personal computers for data collection and transmission by police and emergency medical agencies.
- Through the American Association of Motor Vehicle Administrators (AAMVA), provided technical assistance to States on provisional licensing, false identification, administrative license revocation provisions, older driver education and mobility alternatives, and driver license examiner training.

# RESEARCH AND ANALYSIS PROGRAM

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## RESEARCH AND ANALYSIS PROGRAM

### Highlights Statement

Research and Analysis operates under the mandate of the National Traffic and Motor Vehicle Safety Act of 1966, the Highway Safety Act of 1966, and the Motor Vehicle Information and Cost Savings Act of 1972.

The mission of the Research and Analysis Program is to provide a scientific basis for future reductions in motor vehicle crash losses. This research component consists of broadly based research and development, data acquisition, and analysis programs designed to support those motor vehicle areas that show the greatest promise for avoiding crashes, reducing injuries, and saving lives. The need for developing and applying new technology to solve the nation's motor vehicle problems is evident. Thus, this program is playing a major role in identifying and exploiting advanced technology through its research endeavors.

The Crash Avoidance program fosters the development and early deployment by the industry of affordable, reliable, user-friendly products for improving the collision avoidance of motor vehicles. It provides continued support of heavy vehicle research, the National Advanced Driving Simulator (NADS), and Intelligent Vehicle-Highway Systems (IVHS) program. This program supports three of the Secretarial themes: Strengthening Transportation's Role in Supporting the Economy, Supporting the Safety of our Transportation Systems, and Advancing U.S. Transportation Technology and Expertise.

The heavy vehicle research program will continue its cooperative work with industry to develop a database of truck tire traction characteristics and to assess the occupant protection capabilities of truck interior cab components and cab structural integrity through component and full-scale testing.

The IVHS/human factors program will carry out research to define measurable relationships between driver capabilities and limitations and driver performance, e.g., capabilities and limitations of older drivers, assessment of workload effects associated with in-vehicle displays, optimum methods of warning drivers about potential collision threats, and vehicle-based methods of monitoring driver's performance to warn them of lapses. These data will define an improved driver performance data base which will aid designers in optimizing the interface between technology and the driver and serve as the basis for agency evaluations of the safety impact of adding such devices to motor vehicles. To support the acquisition of needed driver performance/safety evaluation data, the agency will construct the NADS and an instrumented test vehicle which will serve as a testbed for evaluating IVHS hardware and as a safety test vehicle for evaluating the system safety of automated highway system (AHS) concepts. Performance guidelines will be developed for collision avoidance countermeasures to rear-end; lane change, merging, and backing; intersection; and road departure crashes as well as night vision enhancement systems. These specifications will define the performance characteristics, in engineering and human factors terms, of the system which must be met in order to ensure that the designed products achieve their safety potential. These guidelines will be the foundation for development of advanced collision avoidance systems by the motor vehicle industry and for safety impact analysis by the agency. The agency will also continue to work with the industry to evaluate a system for automatically summoning EMS response following a crash and providing the exact location of the crash as well as other mobility enhancing systems.

The Crashworthiness program will insure and promote transportation safety by continuing research on frontal, side, and rollover crashes involving passenger cars, light trucks, and vans. Both analytical and experimental efforts are planned to study and improve the lifesaving characteristics of vehicles in these major crash modes. Preventing occupant ejection will continue to receive emphasis in the research effort. During the 1990's, while the U.S. automotive industry is cutting back on both personnel and funding for basic safety research in order to be lean and efficient in the world market place, the agency's biomechanics group has the sole program developing the frontal impact safety dummy for the early 21st Century. Basic research in the biomechanics of impact injury mechanisms is planned and will provide NHTSA a clearer understanding of what causes injury to people. This increased knowledge will promote technological advancements in the safety arena and allow them to be efficiently integrated with the sometimes conflicting requirements of improving fuel efficiency and minimizing the environmental effects of the automotive fleet. These efforts will also be pursued through collaborative efforts with the Federal Highway Administration, the Department of Defense (Army and Air Force), and the U.S. Auto Industry Research Cooperatives to achieve the President's objectives of fostering intermodalism and his commitment to effectively using technology to meet a variety of national objectives.

The National Center for Statistics and Analysis will continue to use large scale automated data bases to support problem identification, program planning and program evaluation. This data must be of superior quality since it is used by the agency to support research and development of motor vehicle and highway safety policy and programs. With 39,235 fatalities and more than six million police reported crashes in 1992, and direct economic losses from traffic crashes approaching $138 billion per year, motor vehicle and highway safety continues as a top priority in transportation safety. These data also are the primary source of information on motor vehicle and highway safety for other DOT modes, especially the Federal Highway Administration (FHWA). The auto manufacturing and insurance industries, State and local governments, and consumers all benefit from the data produced by NHTSA. The FY 1995 program will continue these major data systems.

## RESEARCH AND ANALYSIS PROGRAM

### Summary of Budget Requirements

|  | FY 1994 Appropriation | FY 1995 Request | Increase (+) or Decrease (-) |
|---|---|---|---|
|  | (Dollars in Thousands) |  |  |
| Positions: | 130 | 132 | +2 |
| Use of Funds: |  |  |  |
| Salaries & Expenses | $9,103 | $9,633 | +$530 |
| Operating Expenses | 2,158 | 2,561 | +403 |
| Contract Program | 38,260 | 36,730 | -1,530 |
| Total, Research & Analysis | 49,521 | 48,924 | -597 |
| Source of Funds: |  |  |  |
| O&R Federal | 38,643 | 38,337 | -306 |
| O&R Trust | 10,878 | 10,587 | -291 |
| Total, Research & Analysis | 49,521 | 48,924 | -597 |

## Position Increase Justification

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request | Change |
|---|---|---|---|---|
| Positions....... | 130 | 130 | 132 | +2 |

In FY 1995, two new IVHS positions are requested for the Crash Avoidance Research Program to support the agency's initiative to significantly improve motor vehicle and highway safety through the application of intelligent systems to motor vehicles. The development, deployment, and use of autonomous and cooperative "smart" vehicle systems will improve drivers' recognition and skills, and compensate for certain driver errors.

Public-private partnerships are an important element in the IVHS program. One engineering position and one human factors position would be utilized to support the agency's increased participation in cooperative agreements with industrial partners in order to accelerate the development and early deployment of IVHS-based collision avoidance systems and to support the agency's responsibility for vehicle engineering, system safety and human factors support for the Department's Automated Highway System Program.

Both of these programs will support a strengthening of the U.S. leadership in producing high technology systems and will facilitate the conversion of defense capabilities to civilian applications.

## RESEARCH AND ANALYSIS PROGRAM

### Contract Program Summary

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| MOTOR VEHICLE RESEARCH | | | |
| Crashworthiness Research | | | |
| Safety Systems | $7,480 | $7,050 | $6,050 |
| Biomechanics | 4,986 | 5,300 | 4,500 |
| Subtotal, Crashworthiness Research | 12,466 | 12,350 | 10,550 |
| Crash Avoidance Research | | | |
| IVHS/Human Factors/ Driver Perf. | 7,024* | 7,500** | 7,271*** |
| Simulator | 5,000 | 0 | 2,000 |
| Heavy Vehicles | 2,774 | 1,097 | 597 |
| Subtotal, Crash Avoidance Research | 14,798 | 8,597 | 9,868 |
| Total, Motor Vehicle Research | 27,264 | 20,947 | 20,418 |
| NATIONAL CENTER FOR STATISTICS & ANALYSIS | | | |
| Fatal Accident Reporting System | 3,933 | 4,338 | 4,338 |
| Nat'l Accident Sampling System | 8,724 | 9,409 | 8,359 |
| Data Analysis Program | 1,575 | 1,625 | 1,824 |
| State Data Systems | 953 | 1,236 | 1,436 |
| Restraint Usage Data Prog. | **** | 350 | 0 |
| Special Crash Investigations | 315 | 315 | 315 |
| Total, National Center for Statistics & Analysis | 15,500 | 17,273 | 16,272 |
| TECHNOLOGY TRANSFER | 40 | 40 | 40 |
| Total, Res. & Anal. | 42,804 | 38,260 | 36,730 |

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* $2 million additional appropriated to NHTSA from FHWA's Budget for conducting IVHS related safety research.

** $7 million additional included in FHWA's FY 1994 appropriation.

*** $10 million additional included in FHWA's FY 1995 request.

**** Funding of $350 thousand for FY 1993 is included in the Highway Safety Program's budget.

## CRASHWORTHINESS RESEARCH

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Safety Systems | $7,480 | $7,050 | $6,050 |

### Program Objective

Frontal, side, and rollover crashes account for most of the deaths and injuries to occupants of passenger cars and light trucks and vans (LTV's). In addition to the harmful interactions resulting from occupant impacts with the various vehicle interior surfaces during these crashes, ejections through door and window areas and pedestrian impacts contribute significantly to the deaths and injuries. Improvements in vehicle structure and occupant compartment design, in combination with improvements in restraint systems, require research in test procedures, biomechanics of injury measurement, and countermeasure development and evaluation. Research will explore the issues associated with the introduction of ultra-stiff, low mass electric and other vehicles that are envisioned as a result of the Administration's "clean car" initiative. The objective of this research program is to undertake these activities so as to ensure and promote transportation safety, and to advance U.S. transportation technology and expertise by investing in the national laboratories.

### Program Description

While continuing much of the FY 1994 research program supporting priority activities for improved frontal crash protection, rollover protection, side impact protection, upper interior head protection, and occupant ejection protection; the planned activities also include the continuation of the development of occupant protection systems/devices beyond the scope of those currently used in passenger cars. These developments include upgraded air bag deployment techniques including precrash sensing, upgraded belt restraints including pretensioners and adjustable anchorages, side inflatable cushions, improved seat designs, improved energy absorbing vehicle interior surfaces, and optimized safety belt/air bag systems that provide improved protection for the elderly. Activities include collaborative, intermodal efforts with the Federal Highway Administration (FHWA) and involve projects with the Lawrence Livermore National Laboratory (LLNL) utilizing their expertise in finite element modeling.

## FY 1994 Program

The FY 1994 research program provides the required support for the comprehensive agency objectives, including activities to support regulatory decisions for interior head protection, rollover protection, door retention components, and improved frontal crash protection. Activities are underway to support agency initiatives in school bus safety, child restraint programs, improving the manner in which vehicle structural components engage during a crash in order to minimize occupant compartment intrusion, and reducing the occupant compartment intrusion and deceleration levels caused by differences in vehicle weight and structural characteristics during a crash. Activities are also underway to ensure that electric vehicles attain an appropriate level of safety compared to that which applies to vehicles with conventional internal combustion engines as required by the Federal motor vehicle safety standards.

## FY 1995 Request

The FY 1995 proposed research program involves continuing many of the FY 1994 research activities supporting agency initiatives and comprehensive agency objectives. Specifically, the program includes the following activities:

- Research will identify and mitigate the safety problems associated with frontal crashes beyond the implementation of Federal Motor Vehicle Safety Standard (FMVSS) No. 208, which requires crash testing of vehicles with instrumented human-like test dummies to measure and minimize the likelihood of occupant injury to the head, chest, and upper legs. The focus will be on the development and evaluation of countermeasures required to mitigate the safety problems associated with injuries to the body regions not covered by 208 (including the neck, abdomen, pelvis, and the lower extremities); injuries associated with occupant age and size; occupant compartment intrusion resulting from offset and higher severity full frontal collisions; and vehicle aggressiveness deriving from vehicle size, stiffness, and geometric incompatibility with collision partners. Research to ensure that electric vehicles and other vehicles developed as a result of the "clean car" initiative attain an appropriate level of safety compared to that which applies to vehicles with conventional internal combustion engines will be undertaken. Research efforts will be expanded for understanding vehicle aggressivity and compatibility. Since much of the test development work will be completed in FY 1994, the work for FY 1995 is expected to involve substantial crash testing of modified vehicle designs. ($1.75 Million)

Test procedures, injury mitigation hardware, and performance criteria will be developed for improved occupant protection in rollover and side impact crashes of LTV's and passenger cars. Collaborative efforts are planned with FHWA for evaluating side impact protection afforded in collisions with roadside hardware. Efforts will be continued at LLNL to refine structural models developed for analyzing side impact crashes. Research will be directed at reducing occupant ejection injuries through improvements as necessary, depending on rulemaking decisions, in glazing, latches, and hinges. Research will utilize advanced structural modeling techniques to analyze roof structure performance during rollover crashes and to develop, build prototype hardware, and evaluate design concepts for reducing roof crush. ($1.6 Million)

Activities will support agency initiatives and actions for school bus safety, child restraint programs, pedestrian and cyclist programs, and the elderly. The focus will be on improved restraint concepts for children and work on the special protection that may be helpful to the elderly. ($1.4 Million)

Research will continue to provide the scientific bases for the development of occupant protection devices beyond the scope of those currently used in passenger cars. Investigations of potential improvements will be expanded of devices including upgraded air bag systems, inflatable automatic belt systems, upgraded air bag deployment technologies including precrash sensing, upgraded belt restraints including pretensioners and adjustable anchorages, side inflatable cushions, improved energy absorbing vehicle interior surfaces, and improved seat designs. Front and rear seat passengers will be included. While the FY 1994 activities will be mostly analytical, the FY 1995 efforts will include hardware development of the promising technologies. ($700 Thousand)

The development and improvements of the existing modeling techniques required to properly characterize the vehicle and restraint system responses and their effects on occupant safety will be continued. This will entail not only software modifications, but also requires component level testing to develop parameter values for the models. Projects at LLNL will provide the necessary improvements to the modeling programs. LLNL will also provide validation efforts using their sophisticated testing capability to provide validation data. Additional full-system testing at other test facilities also will be required for model validation as well as for determination of system performance. ($600 Thousand)

- The issues and problems associated with the introduction of ultra stiff, low mass electric and other vehicles that are on the horizon as a result of the "clean car" initiative will be explored.

Accomplishments

During the past year, a number of activities led to significant accomplishments. These include:

- The first phase of the research program to support the upgrade of child safety rulemaking was completed. This included the assessment of vehicle interior dimensions, the evaluation of air bag/child restraint interactions, the evaluation of front seat characteristics, the evaluation of belt-positioning booster seats, the evaluation of a lap/shoulder belt test procedure, the evaluation of the effect that seat back flexibility has on test results, and the reevaluation of FMVSS No. 213 criteria for the potential upgrade of the standard.
- The preliminary research effort to define the problem determination for the regulatory decision involving improved frontal crash protection has been completed. Additional offset car-to-car testing has been conducted to investigate the effects of overlap percentage, impact angle, and injury criteria modifications. Full frontal barrier crash testing has been conducted to investigate the effects on occupant size.
- Cooperative research grants have been awarded to develop improved air bag occupant protection systems. Among other improvements, this research will investigate anticipatory sensing and methods to utilize pre-crash data in air bag designs which are tailored to the crash environment.
- Sophisticated computer models using finite element methodology have been developed. A model of the agency's side impact dummy has been developed for use in the advanced research effort for side impact protection. A model of a Ford Taurus has been developed for simulating both full frontal and offset crashes into a rigid barrier. Finally, a model of a Nissan pickup truck has been developed to explore countermeasures for reducing roof crush during a rollover crash.

## CRASHWORTHINESS RESEARCH

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Biomechanics Research | $4,986 | $5,300 | $4,500 |

### Program Objective

The purpose of biomechanics research is to advance the basic scientific understanding of the automotive injury process by quantifying the relationships between forces on and motions of the various parts of the body and the risk to life and limb. This knowledge is then translated into testing technologies such as test dummies and injury criteria, such that they accurately evaluate both the fatality and injury risk that those crash circumstances present to a human.

### Program Description

Biomechanics research is the cornerstone upon which many of the agency's performance-based occupant safety initiatives are and will be based. Biomechanics is a science that uses theories, methods, and practices of engineering to identify, study, quantify, control, and prevent impact injuries to humans. The pursuit of the basic science provides a fundamental understanding of the injury process in the human body by defining it in mechanical terms. This supports development of intervention and prevention strategies by correctly modifying or limiting the mechanical components of the impact process that cause injury. Biomechanics research is divided into four major components.

Highway Traffic Injury Studies - The objective of these studies is to identify and understand human injury mechanisms by studying real-world crashes using detailed engineering investigations of crashes, together with detailed medical studies of crash injuries. Medical researchers, accident investigation teams, engineering researchers, and the agency staff identify, investigate, and document causes, conditions, and consequences of selected crashes involving serious injuries. While NASS is vitally necessary to determine the causes (i.e., the specific parts of the car that the occupant's body impacts and the medical effects of such impacts) and the total number of injuries and death that occur each year on a national basis, the statistically relevant sample that the NASS system is able to collect on an individual type of impact is relatively small. These Highway Traffic Injury Studies "over sample" specific types of crashes or injuries and/or gather much more detailed or unusual information that are of specific interest due to near-term priorities of program needs.

Impact Injury Research - The objective of these studies is to provide a detailed understanding of the forces, motions, and distortions that the human body experiences during an impact, and their relationship to the type, location, and severity of the resulting injuries. Impact injury research is the experimental quantification in the laboratory environment (in engineering and medical terms) of the injury mechanisms that affect various parts of the body in automotive crashes.

Human Injury Simulation and Analysis - The objective of the research is to create detailed computer models of the human body that can simulate human impact response and injury in simulated automotive crash events. Using the analytical techniques of modeling engineering structures, this work will develop detailed models of the human anatomical structures of the skull/brain, neck, torso, and limbs. These models will simulate crash impact responses of the human body and predict, using material failure properties, the type, location, and extent of any expected injuries. These mathematical techniques are particularly valuable in efficiently exploring, with a computer, variations in occupant injury tolerance due to variations in occupant size and advancing age (i.e., the added susceptibility of older persons to injury). They also can reduce the need for actual physical testing with dummies or other surrogates. This requires the simulation of not only the human structure but also the vehicle structure with which the crash victim interacts.

Crash Test Dummy Component Development - The objective of this research is to develop test equipment and improved dummy components capable of measuring crash forces and evaluating injury risk in automotive crashes. This work will design, develop, test, and evaluate realistic mechanical substitutes for the human. It will involve dummy subcomponent test devices representing the head, neck, thorax, and limbs. These devices will enable better evaluation of injury potential to allow future improvements in regulatory technologies. Emphasis of proposed efforts will remain devoted to developing and implementing advanced instrumentation techniques, improved dummy components for more accurate evaluation of various restraint conditions, and devices for evaluating specific impact situations.

## FY 1994 Program

The activities and accomplishments of the FY 1994 Biomechanics Program are as follows:

- Highway Traffic Injury Studies: Complete initial group of investigations and analyses of pediatric occupants involved in crashes while being restrained by either a child restraint or available vehicle restraint system. Complete study documenting injury consequences of compartment intrusion associated with high speed crashes. ($800 thousand)

- Impact Injury Research: Complete testing and analyses of frontal crashes conducted using a variety of restraint systems, i.e., air bag, 2- and 3-point belt systems and formulate new thoracic injury criteria. Initiate lateral impact injury program to enhance understanding of associated injury mechanisms and their detection. One of the university laboratories is investigating the biomechanic response and the trauma tolerance of the human lower extremities. ($2,400 thousand)

- Human Simulation and Analysis: Complete initial validation and begin application of brain injury criterion that uses a model of the brain to predict both extent and severity of brain injury given the inertial accelerations experienced by the dummy's head during a crash test. Develop initial validation of the capability of a model of the anatomical neck to predict both ligamentous and bony injuries. ($1,000 thousand)

- Crash Test Dummy Component Development: Complete development and evaluation of a prototype dummy neck possessing biofidelity in flexion-extension, lateral bending, and axial compression-tension. Complete design and evaluation of new lower extremity for a dummy capable of assessing a variety of injury mechanisms. ($1,100 thousand)

FY 1995 Request

The requested Biomechanics research budget proposes to continue research efforts in each of the four major areas of activity: Highway Traffic Injury Studies ($500 thousand), Impact Injury Research ($2 million), Human Injury Simulation and Analysis ($900 thousand), and Crash Test Dummy Component Development ($1.1 million). These efforts are designed to support both the agency's near-term rulemaking priorities as well as the agency's longer term efforts to improve frontal, side, and rollover crash protection by improving the fundamental understanding of the impact injury process, describing these processes in mechanical terms, and designing, developing, and providing appropriate physical test devices which can monitor those mechanical components of the impact process that have been identified to cause injuries.

- Highway Traffic Injury Studies: The efforts will continue to fund modest efforts at several trauma hospitals which combine detailed crash investigations with detailed injury documentation to study and accelerate understanding of emerging safety issues such as extent, severity, and significance of lower limb injuries for fully restrained occupants in frontal crashes and identification and study of unexpected injury modes.

- Impact Injury Research: NHTSA will continue its program of impact injury research. The level of effort in this program area will be achieved by reducing the number of university based Impact Injury Research Laboratories from the current level of five centers to four. Each of these laboratories has a multidisciplinary research team consisting of physicians, engineers, and anatomists that perform these complex research efforts. The research will investigate and develop more definitive injury criteria for major crash modes such as frontal, side, and rollover in significant body regions such as the skull/brain, the neck, the torso, and the lower extremities. This data develops not only the performance criteria for evaluation of injury hazard but also the mechanical response requirements for design of NHTSA's physical test equipment such as test dummies.

- Human Injury Simulation and Analysis: These planned efforts will continue to enhance NHTSA's capabilities to analytically simulate in detail the human in the automotive crash environment with the goal of mathematically predicting the occupant's interaction with typical automotive restraints and structures as well as the extent and severity of expected injuries without physical testing. Emphasis will continue on developing viable and verified response and injury simulation capabilities for the skull/brain, the neck, the torso, and the lower extremities.

- Crash Test Dummy Component Development: Planned research efforts in this area will continue NHTSA's innovative test device development activities which will provide the agency with enhanced test devices, from subcomponent devices representing particular body segments, such as the head, neck, and lower leg, to complete dummies representing the total human, with which the agency can evaluate and regulate safety.

By establishing collaborative efforts with the Federal Highway Administration, the Department of Defense (Army and Air Force), and U.S. Auto Industry Research Cooperatives to achieve these mutually desired research goals, the President's objectives of promoting efficiency, international competitiveness, and long-term economic growth are also pursued.

Accomplishments

- Completed development of first generation brain model that predicts the magnitude and distribution of impact induced brain distortions.
- Demonstrated the capability of simulating the interaction of a detailed model of the human thorax with models of either a torso belt or air bag and predicting where and when rib fracture will occur.
- Expanded impact injury research capabilities by initiating research agreements with two additional research organizations.
- Completed initial set of 50 frontal cadaver tests designed to provide data to develop an improved thoracic injury criterion that can accurately evaluate the performance of either bag, belt, or hybrid restraint systems.
- Completed initial set of side impact human cadaver tests designed to provide data to develop an improved understanding of pelvic trauma, effects of recently developed safety padding on trauma, right side/left side tolerance, and effects of different arm rests on abdominal trauma.

## CRASH AVOIDANCE RESEARCH

| | | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|---|
| | | (Dollars in Thousands) | | |
| Intelligent Vehicle Highway Systems (IVHS)/Human Factors/ Driver Performance | NHTSA | $7,024 | $7,500 | $7,271 |
| | FHWA a/ | 2,000 | 7,000 | 10,000 |

a/ Funds are included in FHWA's budget and provided to NHTSA

### Program Objective

This program will enhance the crash avoidance performance of motor vehicles through the application of intelligent vehicle technology and will help ensure no loss of safety as collision avoidance and mobility enhancement systems are incorporated into motor vehicles. In order to achieve the significant safety benefits offered by advanced technology systems, the characteristics of such systems must be matched to the performance capabilities and limitations of the drivers who must use them.

### Program Description

This program will promote the development and evaluation of advanced technology safety products and systems by implementing the agency's IVHS program Plan.

The agency will establish the safety targets for crash avoidance technology, develop performance guidelines for crash avoidance systems, evaluate the safety performance of such systems, work with industry to demonstrate the most promising ones, and facilitate their deployment in the marketplace.

These pursuits will be addressed by a five-thrust program which will:

- Develop research tools, such as: driver/vehicle performance measurement/analysis systems; instrumented vehicles for gathering data on vehicle performance and driver actions; simulation models for evaluating vehicle interaction with the roadway, driver interaction with the vehicle and highway environment, and the impact of collision avoidance measures on traffic flow; and specialized data bases. These tools will be used in developing a better understanding of driver-vehicle interactions and in exploring potential countermeasure concepts.

Through intensive analysis of agency accident data bases, develop descriptions of the specific crash problems to be addressed to ensure that countermeasures addressing these crash problems can then be specified in performance terms that match real safety needs. Through assessment of the capabilities of technology and first generation collision avoidance systems, develop guidelines for the performance of systems and techniques for evaluating system safety. As soon as performance guidelines are available, the private sector will have product design targets, and the agency will have a basis for conducting safety impact analyses and evaluations and, if appropriate, for initiating rulemaking.

- Conduct in-service field evaluations in conjunction with the industry to assess performance, reliability, maintainability, failure modes/consequences, and costs. Validation of safety specifications under real-world operating conditions will facilitate the final deployment of marketable IVHS systems.

- Participate in the safety evaluations of DOT mobility enhancement technologies to ensure no loss of safety as these technologies are introduced into motor vehicles. NHTSA support for DOT's Automated Highway Systems (AHS) is included in this thrust.

This program supports three of the Secretary's major goals: "Strengthening Transportation's Role in Supporting the Economy, Advancing U.S. Technology and Expertise, and Supporting the Safety of our Transportation Systems." The program also supports the important goals of effectively converting defense capabilities to civilian use and improving U.S. leadership in production of high technology systems.

FY 1994 Program

NHTSA, in FY 1992 initiated a series of multidisciplinary, multi-year research efforts to better understand human factor limitations and capabilities that constrain the performance of IVHS collision avoidance systems and to develop performance specifications for IVHS systems. The FY 1994 program continues funding for these programs to ensure that the safety potential of IVHS crash avoidance technology is achieved in real-world applications. In support of this goal, the agency is pursuing a major research effort to facilitate development and deployment of cost-effective, user-friendly technologies for improving crash avoidance capabilities of motor vehicles.

Research Tools - The FY 1994 program continues funding for the instrumented vehicle and brings the prototype system for acquiring and analyzing data on vehicle location and speeds relative to the roadway and to other vehicles during normal driving maneuvers such as lane changes, congested traffic following, intersection traversal, etc. (definition of the vehicle motion environment will provide a statistical basis of exposure information that can be used to estimate countermeasure benefits), and the portable human factors data acquisition packages to the point of being ready for field evaluation. Driver performance efforts begun in previous years related to enhancing driver/vehicle interaction and reducing conflicts continue. One program identifies the safety-related driving performance capabilities and limitations of older drivers, so that vehicle-based methods of adapting to these driver characteristics can be developed. Another program identifies feedback cues that drivers use to gauge whether their vehicle is under control. Knowing these cues possibly could lead to the capability of modifying them to keep drivers within acceptable vehicle stability bounds, or warning them of operation near the limits. ($3.9 million)

Crash Descriptions - The effort to identify promising crash avoidance opportunities on the basis of crash problem analysis of the agency's extensive data bases declines to a smaller support level in FY 1994, because the initial emphasis on this area over the past two fiscal years has been completed. ($150 Thousand)

Performance Guidelines - Efforts to establish performance specifications for crash avoidance countermeasures (to rear end; lane change, merging and backing; intersection, and road departure crashes initiated in FY 1992) move into Phase II. The focus is on assessment of the state-of-the-art with regard to the component technologies and initiation of work to construct a testbed which functionally represents the intended countermeasure as a first step in verifying, fine tuning and finalizing the performance specification previously developed analytically. These contracts require increased funding during their later stages to support the extensive test program needed to ensure the appropriateness and practicability of the emerging performance specifications. Performance specifications will serve as the basis for evaluating the safety impact of commercially available products and as design targets for products which do not yet exist. Thus, they represent a significant threshold to improved safety. ($3.37 million)

Countermeasure Evaluation - The FY 1994 program provides second year funding to identify practical concepts for a system which would automatically summon an EMS response following a crash and provide reliable data on vehicle location which are worthy of test and evaluation. ($80 thousand)

FHWA Funding for IVHS (FY 1994)

The additional $7 million for NHTSA from FHWA provides the increased funding necessary to support development of performance guidelines. The funds also permit initiation of the field testing, in a rural area, of a communications system for automatically summoning EMS response following a crash and providing reliable data on crash location. Also funded are the agency's mobility enhancements safety evaluations and the human factors and safety-related research in support of the Department's 1997 demonstration of an automated highway and vehicle prototype.

Performance Guidelines - Additional funding in FY 1994 supports the extensive test program needed to ensure the appropriateness and practicability of the emerging performance specifications for crash avoidance countermeasures. ($2 million)

Countermeasure Evaluation - Concepts for a communications system for automatically summoning EMS response following a crash, and for providing reliable data on crash location, resulting from previous research studies, will be evaluated in an operational test to be initiated in FY 1994. If the anticipated significant improvement in the speed of delivery of treatment can be demonstrated, the probability of survival and timely recovery for motor vehicle crash victims will be increased greatly, especially in rural areas. ($3 million)

Mobility Enhancement Safety Evaluations - The ISTEA/1991 mandated the demonstration of an automated highway and vehicle prototype system (AHS) by FY 1997. The agency's crash avoidance projects already planned for FY 1992 and FY 1993 support this project. In FY 1994, NHTSA will support FHWA in identifying AHS system concepts and in assessing the safety, and "user friendliness" of the systems components and subsystems for which the agency is primarily responsible. The success in delivering improved safety depends on matching technology to capabilities and limitations of drivers who must use the developed systems. The agency also is continuing to participate in the safety evaluation of FHWA operational tests in FY 1994. ($2 million)

FY 1995 Request

During FY 1992, FY 1993 and FY 1994, major multi-year projects were initiated to develop research tools and knowledge bases, to define crash avoidance problems and estimate benefits, to develop performance guidelines, to evaluate countermeasures, and to evaluate the impact on safety of mobility enhancement systems. The FY 1995 funding will support the following work:

Research Tools and Knowledge Bases - The driver/vehicle interaction human factors research program will continue experimental studies to define optimum methods of warning drivers about potential collision threats; to assess human factors aspects of safety-related driving performance aids to enhance the capabilities and minimize the limitations of older drivers;

identify feedback cues that drivers use in safely operating their vehicles; define quantitatively driving behaviors that increase crash propensities; assess workload effects associated with in-vehicle display use; continue assessments of display formats used in advanced technology collision avoidance warning devices; continue human factors evaluations of advanced technology lighting and signalling systems; complete cooperative work to assess the human factors implications of the direct and indirect fields of view properties of vehicles; and continue development of vehicle-based methods of monitoring drivers' driving performance to warn them of performance lapses. The experimental results of these studies will define an improved data base on driver performance which will aid designers in optimizing the interface between technology and the driver and serve as the basis for agency evaluations of the safety impact of adding such devices to motor vehicles, i.e., whether the system is "user friendly" and "safety positive."

To support the acquisition of the needed driver performance/ safety evaluation data, the agency will continue developing human factors experimentation capabilities in preparation for the National Advanced Driving Simulator, as well as an instrumented test vehicle which will provide a testbed for evaluating IVHS hardware and will serve as a safety test vehicle for evaluating the system safety of automated highway system concepts. ($3.451 million)

Crash Descriptions - A continuation of a low level of effort on problem definition and benefit estimation is included in this budget request. These analyses will update what is known about the crash problems addressed and, in conjunction with the driver performance data base, will serve as input data to the development of meaningful performance specifications for countermeasures to address them. ($150 thousand)

Performance Guidelines - The budget request includes funding for continuation of projects for developing performance specifications for collision avoidance countermeasures (to rear-end; lane change, merging and backing; intersection; and road departure crashes and night vision enhancement systems). This funding will support the extensive test bed development and testing that will be needed to complete work on performance specifications. These specifications will define the performance characteristics, in engineering and human factors terms, of the system which must be achieved to ensure that the designed products achieve their maximum safety potential. These specifications will be the foundation for development of advanced collision avoidance systems by the motor vehicle industry and for safety impact assessment by the agency. ($3.17 million)

Countermeasure Evaluation - Continued funding will be provided for cooperative agreements with industrial partners to foster development and deployment of collision avoidance systems. These cooperative agreements will enhance the agency's ability to assess the capabilities of the technology being developed to improve safety and to assist in its development and application. ($500 thousand)

FHWA Funding for IVHS (FY 1995)

The $10 million for NHTSA safety programs being requested in the FHWA budget will provide funding necessary to support a continuation of evaluations of the impact on safety of mobility enhancement projects, as well as field testing of collision avoidance countermeasures. The request will also provide increased funding for the development of performance guidelines and development of research tools and knowledge bases.

Research Tools and Knowledge Bases - The proposed funding is necessary to utilize instrumentation systems developed in previous fiscal years to gather data on the vehicle motion environment and driver performance and to develop human factors experimentation capabilities for the NADS. These data bases and experimentation capabilities are critical to both NHTSA and FHWA programs. ($1 million)

Performance Guidelines - This funding is needed to keep the test program for development of performance specifications on schedule. These specifications will be used in both NHTSA programs and in the Automated Highway Vehicle System initiative. ($3 million)

Countermeasure Evaluation - Second year funding will be provided for the evaluation of systems that automatically summon EMS response following a crash and provide the precise location of the crash. The request will also provide support for NHTSA's participation in the IVHS IDEA program of the Transportation Research Board--a program designed to produce new concepts and innovative products that would accelerate the development and implementation of IVHS in the nation's highways, vehicles, and intermodal surface transportation and transit systems. Improving vehicle safety is the principal IVHS IDEA application area. ($3 million)

Mobility Enhancement Safety Evaluations - This funding will support the needed funding for continued evaluation of the safety impact of mobility enhancement systems undergoing field testing in Departmental operational tests. The request will also provide needed support for NHTSA participation in the development of the ISTEA/1991 mandated automated highway and vehicle prototype by 1997. ($3 million)

Accomplishments

- Completed the data acquisition phase of the safety evaluation of the TravTek route guidance and navigation operational test in Orlando, Florida.
- Initiated cooperative agreements with industrial partners to foster the development and early deployment of IVHS collision avoidance systems.
- Completed development of a preliminary driver workload assessment protocol, and development of a preliminary human factors guidelines for IVHS collision avoidance warning systems.

## CRASH AVOIDANCE RESEARCH

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| National Advanced Driving Simulator | $5,000 | $-0- | $2,000 |

### Program Objective

This program will develop a state-of-the-art driving simulator in the U.S. that will serve as a national research asset for use by scientists and engineers in both the public and private sectors.

### Program Description

The simulator is a critical tool needed for the agency to pursue Intelligent Vehicle Highway Systems (IVHS), crash avoidance, and human factors research in potentially hazardous situations without putting subjects at risk. A critical research need is improved understanding about how drivers, including older drivers, interact with their vehicle and the roadway environment. This information is key to the development of systems that can assist drivers in maintaining control of their vehicle in emergency situations, by ensuring a match between technology and the performance capabilities and limitations of drivers who must use this technology. Simulators will be essential to the acquisition of this improved understanding of driver behavior. The use of the National Advanced Driving Simulator (NADS) will be especially beneficial in studying driver behavior in crash imminent situations, and in investigation of concepts for advanced collision avoidance technology. This program will serve to help maintain the U.S. simulation industry's technological leadership in the world and, as such, supports the Secretary's major goal of "Advancing U.S. Transportation Technology and Expertise." It will represent the world's most advanced driving simulator when it becomes operational in early 1998.

### FY 1994 Program

During FY 1994, the NADS design competition will be initiated. Two contractor teams will independently develop design concepts for the NADS; the contractor with the winning design will be selected to construct the NADS. The FY 1994 program will be supported utilizing carry-over funding from previous fiscal years.

FY 1995 Request

The FY 1995 budget request of $2 million will provide incremental funding for the purchase and/or design and fabrication of the major NADS subsystems, namely, the motion system, the computer generated image and audio systems, and the dynamic simulation computers and software. It will also provide the funds necessary for NADS project office and University of Iowa support. The FY 1995 budget will be augmented by available DOT carry-over funding and non-DOT cost sharing funds in the amount of $5.75 million. The University of Iowa has responsibility for securing these cost-sharing funds. These funds should provide sufficient support based on projected expenditures by the contractor in FY 1995.

Accomplishments

- Awarded contracts for the independent development of NADS design concepts by two contractor teams competing to ultimately be selected to construct NADS.

## CRASH AVOIDANCE RESEARCH

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Heavy Vehicles | $2,774 | $1,097 | $597 |

### Program Objective

The heavy vehicle program focuses on making these vehicles brake/handle better and on improving their occupant crash protection performance.

### Program Description

Work will continue to develop and use testing methodologies to assess the crash avoidance and occupant crash protection performance of heavy vehicles. Testing of truck interior components and cab structures to assess their occupant protection capabilities and testing of truck tires to develop a knowledge base describing the contribution tires make to overall heavy vehicle dynamic stability and control will continue at this funding level. Support of current and pending heavy vehicle-related rulemaking actions will continue, including stopping performance and stability and control while braking; lighting, visibility, and marking; and fuel system integrity. The heavy vehicle research program supports the Secretary's major goal of "Supporting the Safety of our Transportation Systems."

### FY 1994 Program

Cooperative work with industry to develop test methods for evaluating the occupant crash protection performance of heavy trucks is being completed in FY 1994, enabling their use to identify alternative improved restraint systems, interior component designs, and cab structural integrity. Similarly, work to develop truck tire traction performance assessment methodologies is being completed, enabling the initiation of work to develop a library of data describing the range of performance characteristics of typical truck tires.

### FY 1995 Request

Work on the crash avoidance characteristics of heavy vehicles will focus on continuing the cooperative work with industry, begun in previous years, to quantify the traction performance of a representative range of typical truck tires and develop a library of truck tire traction data that can be used by designers and truck buyers to configure vehicles with tires optimized for traction, handling, ride quality, and durability. These properties ultimately determine the limits of a truck's ability to turn and stop.

Each year, approximately 900 drivers of medium/heavy trucks are fatally injured in crashes, making truck driving one of the nation's most hazardous occupations. Cooperative research with industry will continue to identify ways of improving truck restraint systems, interior surface padding characteristics, as well as cab structural integrity properties as a means of enhancing truck occupant protection, especially in rollover crashes.

Continuing support will also be provided for current and pending heavy vehicle-related rulemaking actions, including stopping performance and stability and control while braking; lighting, visibility and marking; and fuel system integrity and crashworthiness.

## Accomplishments

- Completed development of test methods for evaluating the occupant crash protection characteristics of heavy trucks.
- Completed first phase of testing needed to develop heavy truck tire traction performance measurement methodology which will enable the subsequent characterization of a representative sampling of truck tires.

## NATIONAL CENTER FOR STATISTICS AND ANALYSIS

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Fatal Accident Reporting System (FARS) | $3,933 | $4,338 | $4,338 |

### Program Objective

The Fatal Accident Reporting System (FARS) is a nationwide data collection system of all fatal crashes in the U.S. FARS is an essential resource that permits the agency and the traffic/highway safety community to quantify and describe the national traffic safety environment. The FARS system collects vital information on over 100 characteristics of drivers, vehicles, and occupants from all fatal traffic crashes occurring in the U.S., the District of Columbia (DC) and Puerto Rico each year. FARS data are used to assess progress in reducing fatalities due to motor vehicle crashes at the national level and in the States. Analyses of FARS data are used to identify highway safety problem areas requiring new or additional research, to support regulatory initiatives and development of new safety countermeasures, and to evaluate current and future safety programs.

### Program Description

More than 150 state personnel provide data entry support to FARS through cooperative agreements with the agency. FARS data are obtained from a variety of state record systems and are coded, entered into a microcomputer located in each state FARS office, and then transmitted to a central pc-based computer system. The electronic data files allow sophisticated analysis of all fatal crashes nationwide which have occurred since 1975. The wide range and variety of data collected provide important insights into the age, license status, etc., of the drivers involved in fatal crashes; the characteristics of their vehicles and passengers; roadway conditions; the critical events leading to the crash; and more. FARS data provided a census of data on the 39,235 traffic fatalities that occurred in 1992.

FARS data are used extensively by NHTSA and FHWA, and by state and local governments, research organizations, private citizens, the auto and insurance industries, Congress, and the media. Since its inception, FARS has come to be recognized throughout the highway safety community as the definitive source of data to assess national progress in improving highway safety. The agency responds to over 3,000 annual requests for FARS information, and sends out more than 50 computer tapes of FARS data every year. FARS furnishes data for the agency's analyses of trends in traffic safety and crashworthiness. For example, FARS supports rulemaking on side and frontal impact protection, analysis of heavy truck crash factors, the agency's review of safety-related defects. FARS is used within the agency to identify and define highway safety problems and to assess the effectiveness of safety improvement actions.

The agency provides basic and advanced training to maintain the level of competence of the FARS state analysts, ensure consistency in data collection, enhance data collection and use, and address emerging traffic safety issues. FARS operations include managing the 52 cooperative agreements to collect FARS data, providing the technical guidance necessary to operate the FARS program, planning and developing training for over 150 state personnel, data processing, maintenance of computer hardware and software functions, telecommunications support, and data collection quality control.

## FY 1994 Program

FY 1994 is the third year of a five-year period of cooperative agreements with the states to collect and code the data necessary to maintain FARS. The FY 1994 budget includes an increase in the state cooperative agreements for salary, overhead, and data acquisition. The FY 1994 budget allows FARS to re-institute its quality control activities, provide specialized training and continue with critical data processing support. The quality control portion is a key area for FARS. Without it, the agency and others are severely limited in their ability to study, with reliability and accuracy, critical issues such as differences in restraint use and their effectiveness, and the fatality experiences of vehicles of various types and sizes. The quality control activities for FARS are essential to sort through coding errors and correct important information such as vehicle identification and alcohol involvement. The FARS quality control program ensures the file's integrity and is essential to the agency's research and analytical activities.

## FY 1995 Request

The FARS program will continue to collect detailed information on a census of all highway traffic fatalities. An electronic data base will be developed to support highway safety analysis and problem identification activities. Training will be provided to state FARS analysts to keep them current on new data elements and changes in coding of current elements to maintain the quality of the data base.

## Accomplishments

- Continued to operate FARS, collecting detailed information on 32,235 fatalities resulting from traffic crashes in 1992.

An extensive range of data from the 50 states, the District of Columbia, and Puerto Rico provide information on the characteristics of crash victims, their injuries, the types of vehicles involved, the roadway and environment, alcohol/drug involvement, and restraint usage.

- Used FARS data as the principal data source to study the involvement of alcohol in fatal crashes, as well as to evaluate safety belt laws, the safety of older drivers, child restraint use, and the involvement of specific vehicle types in fatal crashes with fires, rollovers, and ejections.

- Continued coordination with FHWA to expand their Trucks in Fatal Accidents (TIFA) file. TIFA contains FARS data on fatal crashes involving heavy trucks and data from FHWA's motor carrier accident file. This is an important data base for the FHWA's motor carrier safety activity to identify problems and develop safety programs for large trucks in commercial operation.

- Continued significant upgrades to the FARS training program, including the enhancement of computer aided training lessons to train new FARS analysts in their own state locations. Developed specific training modules to increase state analyst skills in interpreting and coding data in key areas such as crash avoidance maneuvers, heavy truck configurations, drug test results, and commercial drivers license requirements.

## NATIONAL CENTER FOR STATISTICS AND ANALYSIS

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| National Accident Sampling System (NASS) | $8,724 | $9,409 | $8,359 |

### Program Objective

The National Accident Sampling System (NASS) is the only crash data collection program in NHTSA that provides nationally representative data on motor vehicle traffic crashes. Currently, NASS operates two components, a Crashworthiness Data System (CDS) and a General Estimates System (GES). In CDS, information is collected from detailed investigations of approximately 5,500 representative crashes annually that involve light passenger vehicles. This information forms a unique database for agency actions in crashworthiness rulemaking, consumer information on occupant crash protection, and the development and evaluation of countermeasures to reduce occupant injury.

In CY 1992, NASS GES and CDS began collecting key crash avoidance information to support performance specifications for the Intelligent Vehicle Highway Systems (IVHS). The NASS CDS is the sole source of data by which the agency and the highway safety community determine the details of pre-crash events, vehicle crash performance and injury causes and outcomes, and develop vehicle countermeasures for crash avoidance in the real world.

In GES, basic crash data on all types of highway crashes are collected from about 40,000 police traffic crash reports annually. The GES data are used to assess the state of, and determine trends in, overall highway safety in the nation and to add a national perspective to detailed analyses from other data sources. It is the only database currently in place that can provide national estimates for all police-reported traffic crashes and identify potential safety problems and causes.

### Program Description

The vehicle-trauma detail of NASS CDS and the national crash trend data found in NASS GES form the foundation for a comprehensive understanding of both the relationship between vehicle crash severity and occupant injury and the scope of the highway safety problem. These data are not available from any other data system.

CDS data are collected at 24 sites in 17 states and GES data are collected at 60 sites (including the 24 CDS sites) in 26 states. Police reported crashes are sampled according to a complex algorithm to produce nationally representative crash data. Highly specialized NASS CDS Researchers under contract to the agency collect data at the crash scene, inspect the vehicle for specific damage and countermeasure performance, identify injuries from hospital or other medical records, and determine causes of injury.

NASS data have been electronically coded in computerized data files for statistical analysis since 1979. NASS has investigated and collected detailed data on a sample of over 90,000 minor, serious, and fatal crashes. Detailed data have also been collected on over 12,000 special study crashes that focused on specific highway crash issues. Custom software incorporating automated quality control is used for data entry. Separate contractors perform extensive quality control reviews of field case sampling procedures and non-automated data such as scene diagrams and vehicle damage sketches. Additional case data, such as vehicle photographs and scene diagrams, are retained for detailed analysis by the agency and the highway safety community. Contractor staff are trained in NASS investigation procedures at the Transportation Safety Institute in Oklahoma City, Oklahoma. Performance of contractor staff is carefully monitored against defined goals to assure accuracy and completeness of crash sampling and data collection.

Police reports used as the source for GES data are collected by either CDS teams or part-time contractor personnel at non-CDS locations. Data are converted to a common format and coded to the electronic file at one central contractor location. All CDS and GES data are carefully controlled to protect the privacy of involved persons. NASS data are available in electronic data files and in annual reports for selected years. These data are essential to a variety of regulatory and enforcement initiatives. Currently NASS CDS data are supporting rulemaking in light truck side impact and light vehicle rollover crash protection, head injury protection, and occupant ejection. Other uses of the data include in-depth engineering analyses of crashes involving automatic occupant protection systems and evaluation of pre-crash avoidance maneuvers for the problem definition stage of IVHS specifications to improve the man/machine interface in crash events.

FY 1994 Program

In FY 1994 funding will be used to investigate NASS crashes and collect and code data at 24 CDS sites, 60 GES sites, and two CDS Zone Centers. All 26 NASS CDS field contracts were renegotiated in FY 1993 by combining the previous multiple contract structure into two contracts. New contracts were awarded during the first quarter of FY 1994. This new contract structure is expected to improve field productivity and consolidate agency contract management activities. An allowance for negotiated increases in labor costs in these contracts ($260 thousand) is included in the FY 1994 request as well as funds ($250 thousand) for the final closeout of the 26 completed contracts.

About 5,500 crashes are being investigated at the 24 CDS sites bringing the total of the detailed CDS file to over 40,500 cases. Information on about 40,000 crashes are being entered into GES data files. An annual data report is being issued for GES and an update of the multi-year CDS report is being prepared.

Work is continuing in FY 1994 on upgrading and reprogramming the CRASH algorithm which is essential for relating crash severity to injury levels, particularly for newer vehicle designs. Planning and development of the Pedestrian Data Study is continuing with implementation of data collection tentatively scheduled for mid-year CY 1994. Research is being initiated for development of a rollover data collection procedure that can be implemented with little impact on the researcher's time for damage profile documentation. Work is continuing on a NHTSA-wide re-evaluation of NASS CDS to determine where changes are required in the data used to support the establishment and enforcement of motor vehicle regulations.

FY 1995 Request

The FY 1995 funding will be used for NASS CDS and GES operations. The CDS program will support collection of information on about 4,500 cases per year at this funding level. One initiative, the Pedestrian Crash Data Study, is planned at this level. The cost for conducting this initiative will be offset by reducing the normal case selection from the CDS by 600 cases. The CDS data forms an unique data base for agency work in crashworthiness rulemaking, crash avoidance including IVHS initiatives, and the evaluation of countermeasures to reduce occupant injuries.

The GES system will support collection of 30,000 Police Accident Reports on all types of highway crashes. This data forms the basis for understanding the total highway crash environment. It is used to identify trends in overall traffic safety and to add a national perspective to detailed analysis from other, more detailed data sources.

Accomplishments

- Collected and coded a sample of over 40,000 crash reports for GES to provide national estimates of highway crash statistics in the United States and trends in highway safety.

- Collected detailed, in-depth data on a sample of over 5,000 passenger car, light truck and van crashes in CDS with emphasis on late model year vehicle crashes resulting in hospitalization.

- Published annual GES data of police-reported traffic crashes in the United States in the combined FARS/GES annual report and incorporated GES data in other agency reports including the Medium and Heavy Truck Report and various highway crash fact sheets.

- Released annual GES and CDS statistical files for sale to the public and continued making CDS case records, with personal identifiers removed, available to the public for engineering analysis.

- Completed the second year of data collection for additional rollover causation factors in both CDS and GES, and additional on-scene roll dynamics data in CDS.

- Added data elements to both CDS and GES to increase the amount of data collected on precrash maneuvers to support problem definition for IVHS specifications.

- Updated CDS trauma data procedures to incorporate the Association for Advancement of Automotive Medicine (AAAM) 1990 injury scales and added other trauma data elements.

- Continued the collection of extensive drug evaluation classification data for involved drivers in the CDS sample.

- Provided in-depth injury information on air bag and automatic belt data from NASS CDS cases for engineering analyses for continuing research on Federal Motor Vehicle Safety Standard 208, the federal regulation requiring a four year phase-in of automatic protection systems in passenger cars.

- Utilized CDS statistical data for crash protection regulatory actions on light truck side crash protection, passenger vehicle rollover crash protection, interior head injury protection, door retention components, and seat strength.

- Utilized GES and CDS data in preliminary regulatory actions including child booster seats, reflective materials on heavy trailers, and truck rear underride guards.

- Utilized GES and CDS data in numerous non-regulatory reports including Pedestrian/Bicyclist crashes, costs of motor vehicle crashes, school bus crashes, blind spots in heavy trucks, child safety seat effectiveness and child safety seat testing in side impacts, and fatalities and injuries in passenger car center-rear seats.

## NATIONAL CENTER FOR STATISTICS AND ANALYSIS

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Data Analysis Program | $1,575 | $1,625 | $1,824 |

### Program Objective

The principal objective of the National Center for Statistics and Analysis (NCSA) data analysis program is to analyze motor vehicle crash and related data to support NHTSA's research, rulemaking, enforcement and traffic safety efforts. The results of these analyses not only form the basis for agency decisions affecting motor vehicle and traffic safety, but also are used by the entire highway safety community to understand problems, set priorities, and target resources where they will be most effective.

### Program Description

The data analysis program provides analytical and statistical support to the agency and the highway safety community at large in the general areas of data analysis, sampling and survey design. In general, these analyses have one or more of the following objectives: (1) relate human, vehicle, environmental and roadway characteristics to crash frequency and the severity of injuries sustained in these crashes, (2) identify injury mechanisms and associated crash dynamics in motor vehicle crashes, (3) evaluate the effectiveness of crashworthiness, crash avoidance and traffic safety efforts, (4) monitor the magnitude of the traffic safety problem, and (5) quantify the benefits resulting from proposed or implemented agency initiatives. NCSA's major analytic activities are guided by an agenda developed at the beginning of each fiscal year with direction provided from all program offices in the agency. This analytic agenda is the basis for major analytic work to be initiated in that fiscal year.

In addition to carrying out these analytic functions, the analysis program also produces regular statistical reports summarizing particular aspects of the nation's motor vehicle crash problem. The reports serve as indispensable reference material for the highway safety community to understand the nature and extent of problems in these areas. Further, NCSA responds to approximately 10,000 inquiries for crash statistics and other information each year. These requests come from the public at large, the highway safety community, foreign governments, Congress, and the motor vehicle manufacturing industry. The bulk of requested funds are for acquiring the data processing and technical support services needed to support these analytic activities.

FY 1994 Program

NCSA's FY 1994 program includes maintaining the current level of analytic support provided to the various agency programs, as well as expanding technical support resources. The expanded requirement for technical support results from the growing needs of the agency, especially in the areas of traffic safety program monitoring and evaluation of countermeasure effectiveness, as well as analytical assistance to states and increased analysis of medical outcome data. This last requirement stems from the increasing quality and availability of trauma-related data systems being implemented within the states, especially related to the Crash Outcome Data Evaluation Study (CODES) project.

FY 1995 Request

Resources will be devoted to the areas of state analytical assistance, analysis of countermeasure effectiveness and some analysis of CODES-type medical outcome data. As most higher priority analysis efforts are conducted by in-house professional staff, NCSA will continue to provide analytical and statistical support. The requested increase in funding includes an expansion of resources devoted to State analytical assistance (in many cases this involves analytical support for legislative initiatives in the states), evaluation of countermeasures effectiveness and the analysis of CODES-type medical outcome data. In addition, the funding will make it possible to provide increased statistical support to meet the growing needs of the agency especially in the areas of traffic safety program monitoring, work on demographic targeting, evaluation, analytical assistance to states, and increased emphasis on crash avoidance countermeasures. Broad-based quality control efforts will be undertaken. These quality control activities will build upon those currently conducted at the internal system level (e.g., with vehicle identification numbers and coding) for NCSA's data systems to encompass file maintenance, analysis integrity, and information dissemination.

Accomplishments

- Report to Congress on the Effectiveness of Automatic Occupant Protection Systems and Their Use (FMVSS 208): NCSA compiled the report using materials from the Evaluation of the Occupant Protection Program (above) and input on restraint use provided by Traffic Safety Program's Office of Occupant Protection.

- Assessment of Fire Occurrence in Crashes Involving Heavy Trucks: Working with Rulemaking staff, NCSA provided data analysis in support of the upgrade of FMVSS 301 (Fuel System Integrity) for heavy truck crossover lines.

- Analysis of the Statistical Relationship Between HIC and the Probability of Cadaveric Skull Fracture and Brain Injury: At the request of Plans and Policy staff, NCSA re-analyzed existing cadaveric data to support the computation of projected benefits for the recent amendment to FMVSS 201 (Occupant Interior Protection).

- Analysis of Light Vehicle Rollover: NCSA conducted the analysis of the relationship between light vehicle rollover occurrence and measure of static stability/directional control. In this regard, statistical models were developed to document the relationships proposed for establishing rulemaking alternatives to the solution of the light vehicle rollover problem. These analyses were documented by NCSA staff in a technical report that formed the basis for the ANPRM and was subsequently presented at SAE meetings. The effort is continuing as new data for both crashes and vehicle metrics are added.

- Investigate the Relationship Between State-Reported Belt Use Survey Results and Reported Belt Use in FARS: NCSA developed statistical models to relate state survey estimates of belt use with belt use in fatal crashes. This information can be used to compare reported observational surveys with use documented in FARS as a check on the validity of reported state belt use survey estimates.

- Alcohol Involvement in Fatal Crashes — 1990: As part of NCSA's routine reporting of alcohol statistics, produced annual report of alcohol involvement in fatal crashes, covering various person-level, vehicle-level and crash-level characteristics. The report documents changes in alcohol involvement since 1982.

- Speed Limit Compliance re: NMSL (National Maximum Speed Limit) in Response to ISTEA Requirement: NCSA developed the speed limit compliance formula to determine whether states would be in compliance with the national maximum speed limits. In addition, NCSA developed statistical models for establishing the criteria of reasonable levels of allowable percentages of vehicles to exceed various speed intervals (+5, +10, and +15 mph over posted speed limits). This information was used directly in the NPRM.

- Development of Estimates for Older Driver Travel: NCSA developed estimates for vehicle miles of travel for older driver age groups. These estimates were based on data collected by the National Personal Transportation Survey, which aggregated data for persons age 65 and older. More detailed data was required in order to focus on drivers age 65-69, 70-74, etc.

- Analysis of Inadvertent Safety Belt Latch Opening: NCSA provided analytical support to the Office of Defects Investigation, developing statistical models to investigate the injury risk to occupants of passenger cars equipped with "end release" vs. "side release" safety belt buckles. Data from FARS, NASS Crashworthiness Data System and state files were used to demonstrate no differences in injury rates or ejection rates for the two systems.

- Analysis of GM C/K Pickup Truck Fire Occurrence: Using data from FARS and state files, contrasted the rates of fire and Most Harmful Event fire for GM C/K, Ford F-Series and Dodge D/W series pickup trucks using on an involved-vehicle basis and on a per registered vehicle year basis (using data from R.L. Polk). In addition, developed estimates for a broad range of passenger vehicles in most crash modes (frontal, side and rear).

- Provided Responses to over 10,000 Inquires for Information on Motor Vehicle Traffic Crashes: During the year NCSA received approximately 10,000 inquires for information on motor vehicle traffic crashes from within NHTSA, DOT, the highway safety community, Congress, the media, representatives of State and local governments, and the general public. Data were provided for all these requests from information available from NCSA's databases.

- Published Reports using Data from NCSA Databases: Reports which serve as invaluable reference resources for NHTSA, DOT, the highway safety community, and others were published using NCSA's major databases. The reports published include the 1991 FARS Annual Report, the 1991 NASS GES Annual Report, 1992 Traffic Fatalities Preliminary Report, 1992 Traffic Crashes Preliminary Report, Alcohol Involvement in Fatal Crashes - 1991, Changes in Alcohol Involved Fatal Crashes Associated with Tougher State Alcohol Legislation, Summary of Medium & Heavy Duty Trucks in 1990, and 1991 Motorcycle Crash Facts, Elderly Crash Facts, Occupant Protection Facts, Drunk Driving Facts, Pedestrian Crash Facts, Large Truck Crash Facts, and Pedalcycle Crash Facts.

## NATIONAL CENTER FOR STATISTICS AND ANALYSIS

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| State Data Program | $953 | $1,236 | $1,436 |

### Program Objective

State data are an important source of information for addressing highway safety issues. They are particularly suited for examining the statistical relationships between vehicle design characteristics, crash involvement and injury propensity, analyses that require data bases much larger than that produced by the NASS Crashworthiness Data System or that is not outcome related like the Fatal Accident Reporting System. Within the agency, state data have been and continue to be used to support some of the agency's highest priority programs including: defect investigations; light duty vehicle rollover; inadvertent safety latch opening; car weight/safety analysis; IVHS; occupant restraint systems and anti-lock braking systems; and onboard refueling vapor recovery systems. The objective of NHTSA's State data system program is to provide the best quality data related to motor vehicle traffic crashes at the State level for agency use in analyses. This involves developing the analytic potential of State data of relevance to highway safety including police reported accident data, medical outcome data, and other data bases such as driver and vehicle records.

### Program Description

A primary component of NHTSA's state data program is obtaining accident data files from states and making those files usable to NHTSA analysts by converting them into a format which can be processed by the agency's analytical software. Currently, accident data files from 17 states are obtained, documented, and converted into a format which can be used by NHTSA analysts through the Statistical Analysis System (SAS). From these databases, program staff also make analytical retrievals to provide for the informational needs of the agency. Other specialized databases, such as the CARDFile database, are created.

NCSA also conducts programs to improve the usefulness of state data for highway safety analysis and assists states in developing statistical expertise to carry out analyses which support the development and evaluation of their highway safety programs. By using their own data bases, states will recognize shortcomings and will work toward improving them.

The Intermodal Surface Transportation Efficiency Act of 1991 required NHTSA to report to Congress on the benefits of safety belts and motorcycle helmets. NHTSA is using this opportunity to work with several states to develop Crash Outcome Data Evaluation Systems (CODES), as the source of data for this report. To accomplish this, NCSA has worked with states to encourage the linking of medical outcome databases with crash data. By supplementing police reported data with injury outcome data, CODES offer a rich potential for analyses in the many highway safety areas which need population based injury outcome data in more detail than that provided by police. Linking with long term care and financial data will provide a source of information not available through any of NHTSA's other data sources.

CODES link crash data with medical outcome data (i.e., emergency medical services data and hospital discharge data), and makes crash data more useful to states for highway safety purposes. Thus, the agency will investigate the utility and accuracy of these linked databases and will develop proposals for detailed analyses which use these databases to determine how their data can be used to support highway safety efforts. The agency is working to encourage institutionalization, and also eventual funding, of CODES within participating states by encouraging development and use of these potentially valuable data bases.

## FY 1994 Program

The agency's FY 1994 program includes efforts to obtain copies of state motor vehicle crash data files and convert them into a format which can be used by NHTSA analysts. The agency will continue to carry out plans to encourage state adoption of the CADRE, data elements necessary to improve their databases, and will provide technical assistance to states to assist in the development of their analytical capabilities. The agency's CODES program will continue to provide states with guidance and assistance in the development of a medical outcome data system suitable for addressing state and local highway safety issues when linked with crash data. NCSA will continue to work with those states funded through ISTEA to complete their CODES data base and to report on the benefits of safety belt and helmet use. These states will be providing a copy of their data bases to NHTSA, and the agency will use these data to begin producing a report to Congress on the benefits of safety belt and motorcycle helmet use. NHTSA will implement a project to explore the databases, develop proposals for more detailed analyses, and determine how the data can be used to support highway safety efforts other than restraint use benefits (e.g., crashworthiness, EMS, enforcement, and alcohol programs).

FY 1995 Request

NCSA would continue its efforts to provide and improve state data in support of its analysis program. Obtaining, documenting, and converting to SAS formats the data files for the 17 states in the State Data Program would continue as would the development of ancillary databases. Implementation of CADRE, assisting states in analytical efforts, and in evaluating the usefulness of linked crash and medical outcome data (CODES) would continue.

The increase in funding will be used to encourage states to use probabilistic linkage methodology to link traffic records databases. This data is increasingly important as it will allow states to quantify the public health costs associated with traffic crashes. Increased technical assistance would be provided to states who are in the process of linking or who are exploring possible analytical uses of their linked data.

Accomplishments

- Streamlined data files from 17 states into format usable by analysts on personal computers through the Statistical Analysis System (SAS) and converted data from six states into CARDFile format.
- Used data from state files to support analyses to examine injury rates of helmeted motorcycle drivers vs. unhelmeted motorcycle drivers, to examine restraint use in emergency vehicles, and to examine vehicle design features.
- Worked with the State of Virginia on a special study to determine severity of head injury in motorcycle crashes by linking crash data with trauma data. Data collection is completed and data linkage is in process.
- Created a CADRE implementation plan.
- Completed a state-by-state CADRE assessment to determine the level of CADRE implementation.
- Worked with the Centers for Disease Control to assist with a national trauma data inventory. Data collection instrument design was completed.
- Entered into cooperative agreements with states to initiate a Congressionally mandated study (ISTEA Section 1031(b)) on Safety Belts and Motorcycle Helmet Use Benefits. Awarded approximately $5 million to seven states to develop sophisticated crash, medical outcome, and medical payment information data linkage in order to properly complete study.

- Provided technical assistance to states interested in improving their restraint use surveys.

## NATIONAL CENTER FOR STATISTICS AND ANALYSIS

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Restraint Use Data Program | * | $350 | $-0- |

*In FY 1993, funding of $350 thousand for the 19-City Survey was contained in the budget of the former Office of Driver and Pedestrian Research, R&D, now the Office of Program Development and Evaluation, TSP.

### Program Objective

NHTSA develops and implements at national and state levels a variety of programs which promote the use of occupant restraints. To support these programs, occupant restraint use data are needed to set priorities for planning highway safety programs and to help determine whether new rulemaking initiatives are needed to improve occupant protection. In addition, belt use data are often used in Evaluation Reports and in Regulatory Impact Analyses, even beyond analyses of Federal Motor Vehicle Safety Standard 208, Occupant Crash Protection. Many of these programs target specific age groups or occupants of specific vehicle types. The objective of the Restraint Usage Data Program is to provide information on safety belt, child safety seat, and motorcycle helmet usage necessary to support the agency's programs to increase occupant restraint use.

### Program Description

Previously, the agency obtained much of its occupant restraint use data through its program for measuring trends in restraint use, the 19-City Survey. That program was canceled in FY 1992, and the agency became dependent on the use of state-conducted survey data on restraint use for an overall estimate of restraint usage. State surveys, however, vary in quality and in data collected. Most state surveys concentrate only on the restraint use of front seat outboard passengers and do not collect the detailed demographic or vehicle information needed by the agency. Additionally, state surveys do not uniformly cover the same population of interest, excluding portions of the state or road segments which do not meet a minimum daily traffic volume. These factors, combined with the differences in the statistical design of state surveys, mean that their data are at best useful at the national level for an overall usage estimate.

NHTSA is in the process of implementing a new program to provide for its specific restraint use information needs beyond that which can be met with state restraint use surveys. In FY 1993, NHTSA implemented a contract to provide resources for designing and conducting observational restraint use surveys. This contract allows flexibility in meeting the agency's changing restraint use data needs, from conducting a national survey of belt usage to studying patterns in child safety seat use and misuse.

### FY 1994 Program

In 1993 the agency identified its occupant restraint use data needs. As a result of this needs study, NHTSA is designing and implementing a nationwide survey in FY 1994 to observe both occupant restraint use in passenger vehicles and motorcycle helmet use. This first-time national survey of restraint use will provide the agency with basic information at the national level on estimates of restraint use (e.g., overall restraint use, driver versus passenger, basic age groups, passenger car versus light truck) for its restraint use programs.

### FY 1995 Request

No funding for restraint use data collection is requested for FY 1995.

### Accomplishments

- Completed procurement process to obtain a contractor to support the design and collection of occupant restraint use and motorcycle helmet use information.

- Tasked the new contractor to design a national survey of occupant restraint and motorcycle helmet use.

- Conducted a first-time national survey of occupant restraint and motorcycle helmet use.

## NATIONAL CENTER FOR STATISTICS AND ANALYSIS

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Special Crash Investigations | $315 | $315 | $315 |

### Program Objective

The Special Crash Investigation (SCI) program provides the flexibility to acquire detailed engineering information on crashes of special interest which fall outside the established scope or criteria of other agency data systems. It is the agency's sole resource for examining the safety impact of rapidly changing technology and exploring alleged or potential vehicle defects. These include but are not limited to investigation of crashes in which an air bag or safety belt system appeared to operate in an unexpected manner, crashes involving heavy trucks, crashes involving alternative fuel vehicles, crashes involving children in restraints, and serious school bus crashes not investigated by other Federal agencies. As new highway safety issues emerge, this program has a capability to respond quickly for collection of field information to support agency analysis and appropriate action.

### Program Description

This program utilizes highly skilled, geographically dispersed crash reconstruction teams to determine relevant crashworthiness and causation issues in selected crashes. These assessments involve determination of crash severity levels, occupant injury mechanisms, restraint use assessments, and the role of vehicular components and characteristics in crash events; and aid in the identification of countermeasures for injury reduction and crash avoidance. These major crash investigations are coordinated with other relevant Federal agencies. Major support has been provided to the agency's effort to monitor the real world field performance of air bags and safety belts which has resulted in the investigation of approximately 60 vehicle crashes each year. Support also has been provided to the agency's enforcement and rulemaking programs through the investigation of selected school bus, safety defect, and electric vehicle crashes. An electronic data file system has been created and is utilized for information storage and retrieval on these crashes.

### FY 1994 Program

The FY 1994 budget of $315 thousand continues the work of three special indepth crash investigation teams which conduct clinical crash investigations on selected crashes of interest to the agency, and which are outside the scope of the NASS or FARS programs. These crashes involve automatic restraint systems (including air bags), child restraints, school buses, potential safety defects, or other agency priority issues.

FY 1995 Request

Funding the Special Crash Investigation program at the FY 1995 Request level of $315 thousand will allow for the continued investigation and distribution of information concerning approximately 60 special interest crashes which pertain to driver air bag system performance, school bus pedestrian and crashworthiness issues, and unique safety defect investigations.

Accomplishments

- Completed over 60 crash investigations involving automatic restraint performance, school bus pedestrian fatalities, potential safety defects, school bus crashworthiness, and other issues of concern to the Agency.
- Completed the final year of data collection for cases involving child restraints in conjunction with a Children's Hospital trauma center.
- Completed updating of the automatic restraint electronic data file and transfer of over 700 cases to the publicly accessible storage facilities.

## TECHNOLOGY TRANSFER

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Technology Transfer | $40 | $40 | $40 |

### Program Objective

The objective of this program is to inform a broad community of people interested in motor vehicle and highway safety about NHTSA's research results so they may be put to effective use more quickly to improve motor vehicle and traffic safety.

### Program Description

The program in FY 1995 will continue the publication of NHTSA's technical journal, Auto & Traffic Safety. This journal describes recent research results of interest to the motor vehicle and highway safety community.

### FY 1994 Program

The FY 1994 funding provides for contract support necessary for publishing Auto & Traffic Safety two times each fiscal year. It covers the technical editing and layout of the contents of each issue.

### FY 1995 Request

These funds will provide the necessary contract support for technical editing of two issues of Auto & Traffic Safety. This publication contributes primarily to the Secretary's theme of supporting the safety of our transportation system. By giving wider dissemination of research results in the field of motor vehicle and highway safety, it also contributes to the Secretary's theme of advancing U.S. transportation technology and expertise.

### Accomplishments

Publication of Auto & Traffic Safety started in FY 1991. The second issue will be published in the Winter of 1994. Thereafter, the journal will be on a semiannual schedule. The agency has received more than a thousand requests to be added to the mailing list.

# OFFICE OF THE ADMINISTRATOR AND STAFF OFFICES

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## OFFICE OF THE ADMINISTRATOR AND STAFF OFFICES

### Highlights Statement

The Office of the Administrator budget activity provides for the overall executive direction, coordination and implementation of the administration's programs in accordance with statutory authority derived from the National Traffic and Motor vehicle Safety Act, the Highway Safety Act, and the Motor Vehicle Information and Cost savings Act.

In the area of executive direction, responsibilities include providing leaership and direction; initiating new programs to reduce traffic fatalities and injuries; coordinating research and development efforts to meet legislative objectives; determining program modifications to meet changing needs and requirements; and coordinating program and management policies.

In addition to the immediate office of the Administrator, the following staff offices receive funding from this budget activity: Deputy Administrator, Executive Director, Intergovernmental Affairs, International Harmonization, Executive Secretariat, Civil Rights, Public and Consumer Affairs and Chief Counsel.

## OFFICE OF THE ADMINISTRATOR

### Summary of Budget Requirements

| | FY 1994 Appropriation | FY 1995 Request | Increase (+) or Decrease (-) |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| **Positions**: | 41 | 41 | 0 |
| **Use of Funds**: | | | |
| Salaries & Expenses | $2,893 | $3,018 | +$125 |
| Operating Expenses | 597 | 699 | +102 |
| Total, Administrator's Office | 3,490 | 3,717 | +227 |
| **Source of Funds**: | | | |
| O&R Federal | 2,554 | 2,720 | +166 |
| O&R Trust | 936 | 997 | +61 |
| Total, Administrator's Office | 3,490 | 3,717 | +227 |

## GENERAL ADMINISTRATION

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# GENERAL ADMINISTRATION

## Highlights Statement

The General Administration budget provides resources for the administrative planning, development, coordination, program evaluation, and economic analysis functions necessary to support the agency's programs and mission.

The administrative portion includes personnel management and organization planning, financial management, management data systems, management improvement, and contracting and procurement. In addition, administrative support services are provided for effective program operations, including general services, computerized data services, and technical reference services relating to motor vehicle and highway safety research documents.

## GENERAL ADMINISTRATION

### Summary of Budget Requirements

| | FY 1994 Appropriation | FY 1995 Request | Increase (+) or Decrease (-) |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Positions: | 90 | 90 | 0 |
| Use of Funds: | | | |
| Salaries & Expenses | $6,243 | $6,515 | +$272 |
| Operating Expenses | 1,312 | 1,534 | +222 |
| Contract Program | 725 | 789 | 64 |
| Total, General Administration | 8,280 | 8,838 | +558 |
| Source of Funds: | | | |
| O&R Federal | 6,289 | 6,711 | +422 |
| O&R Trust | 1,991 | 2,127 | +136 |
| Total, General Administration | 8,280 | 8,838 | +558 |

## GENERAL ADMINISTRATION

### Contract Program Summary

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Program Evaluation | $360 | $500 | $489 |
| Strategic Planning | 0 | 125 | 200 |
| Economic Analysis | 0 | 100 | 100 |
| Metric Conversion | 50 | 0 | 0 |
| Total, Gen. Admin. | 410 | 725 | 789 |

GENERAL ADMINISTRATION

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Program Evaluation | $360 | $500 | $489 |

Program Objective

The objective of the program evaluation activity is to gather information on NHTSA vehicle regulatory and highway safety programs and measure their effectiveness in achieving their objectives (such as reducing injuries and fatalities in traffic crashes).

The evaluation results may serve as a basis for rulemaking decisions on present and future rules. Current vehicle safety standards may be modified, deleted or continued as a result of a thorough evaluation and verification of improved safety performance of the affected motor vehicles. Evaluation of existing regulations is a requirement for Federal agencies under Executive Order 12291. Evaluation results may be used to direct grant programs and technical assistance that are designed to improve the effectiveness of State and community highway safety programs.

Program Description

The evaluation of Federal Motor Vehicle Safety Standards (FMVSS) systematically establishes the effectiveness of major standards and programs which have been in effect for several years. The evaluation process begins by determining if and how the standard or program can be evaluated. Then a series of studies are conducted to: collect and analyze actual or surrogate data to determine changes in program experience; estimate changes in consumer costs for vehicle safety equipment; analyze results of the effectiveness and cost studies to estimate overall standard effectiveness in terms of benefits and costs; and assess results of highway safety activities.

For highway safety programs, trends over several years in how states respond to Federal initiatives and how they use Federal assistance are analyzed to determine program improvements and the extent to which states and localities continue programs with their own funds after Federal grants end.

FY 1994 Program

The automatic occupant crash protection evaluation included in the agency's Priority Plan continues with studies of effectiveness, operating performance and public acceptance. The National Highway Safety Assessment will be continued in three additional states. The agency will begin an evaluation of the new dynamic side impact standard for passenger cars. Additionally, a one year nationwide odometer fraud study will be undertaken.

## FY 1995 Request

Automatic occupant crash protection will be phased into light trucks beginning in 1994. A teardown cost study of air bags in light trucks will be done to support an evaluation of the effectiveness of automatic occupant protection for light trucks. This is part of the agency priority study of automatic crash protection that has been ongoing since 1990. To complete the nationally representative sample of states for the Highway Safety Assessment, begun in FY 1992, two states will be surveyed in FY 1995. Evaluation of side impact protection begun in FY 1994 will continue with additional teardown cost and testing studies.

New initiatives in 1995 include the following projects. The Anti Car Theft Act of 1992 expands the parts-marking requirement to vans and utility vehicles weighing less than 6,000 pounds with higher-than-average theft rates (beginning in Model Year 1994) and for half the passenger car, van and mpv lines with lower-than-average theft rates (beginning in Model Year 1995). In 1997, NHTSA is required to provide a report to Congress on the effects of the Anti Car Theft Act on vehicle theft and recovery. In FY 1995, work will begin to collect and analyze theft and recovery data for 1991-1993 (baseline data) and for 1994, the first year that vans and utility vehicles will have marked parts.

The evaluation of steering assembly (FMVSS's 203 and 204) and interior impact protection (FMVSS 201) in light trucks is planned for FY 1995. Preliminary studies of effectiveness and costs have been completed, but a more comprehensive study remains to be done.

Rear window defoggers and wipers (FMVSS 103) are planned for evaluation in FY 1995.

## Accomplishments

- Submitted report to Congress on Effects of the Motor Vehicle Theft Law Enforcement Act of 1984 (3/1991).
- Completed evaluation of Motor Vehicle Fires in Traffic Crashes and Effects of the Fuel System Integrity Standard (11/1990). This has led to an agency plan for upgrading FMVSS 301, the Fuel System Integrity Standard.

- Completed study of Effect of Car Size on Fatality and Injury Risk (9/1991).
- Completed tear-down cost study of antilock brake systems (7/1991).
- Completed evaluation of tire labeling standards (1/1992).
- Completed the pilot study in Washington State for the Highway Safety Assessment (12/1992).
- Completed the Interim report of the Evaluation of the Effectiveness of Occupant Protection (FMVSS 208) (6/1992).
- Completed Tear-down Cost Study of Manual and Automatic Crash Protection Systems in 1988-1992 Model Year Passenger Cars (9/1992).
- Completed an evaluation of the performance of Antilock Brake Systems for cars and light trucks, based on stopping tests under various road conditions (5/1992).

## PROGRAM DIRECTION AND COORDINATION

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Strategic Planning | $-0- | $125 | $200 |

### Program Objective

The Department recognizes that strategic planning is crucial to the responsiveness, effectiveness, and productivity of its programs. NHTSA has responsibilities that require an ability to anticipate both behavioral and technological change involving long lead times for development and implementation. Therefore, strategic planning has been established within NHTSA.

Strategic planning will provide a long-term vision for the agency. It is the primary mechanism for reinventing government and effecting and implementing change in the organization. Strategic planning will set clear goals and objectives against which the agency can evaluate its performance and customer service. It will enhance policy making, organization, and management, resulting in improved efficiency and effectiveness. It will help ensure that funds and resources are dedicated to the projects and programs that offer the greatest benefit.

### Program Description

Strategic planning formulates demographic, economic, institutional, and technological forecasts into the Twenty-First Century. Particular objectives are to examine and make projections of the future for highway safety; study technological opportunities and challenges; and assess agency institutional relations with State and local government, Congress, industry, private groups, and others involved in its issues. Strategic planning also examines NHTSA's organizational and management effectiveness. Using this information as a basis, senior management will establish the future direction of NHTSA by defining the agency's vision, mission, values, and goals. From these efforts come a strategic plan and business implementation plans for agency programs.

### FY 1994 Program

The agency's first strategic plan will be completed in FY 1994. This plan will embody the agency's goals for the future and strategies that will be employed to achieve the goals. This strategic plan also will provide the basis for program development and resource allocation decisions. The focus of

FY 1994 activities is to complete and implement the strategic plan, and provide support for follow-on strategic planning and management efforts. These activities include preparing strategic execution plans covering 3-5 year periods, that will tie the strategic plan to realistic incremental shifts in functions, organizational structure, program plans, staffing, equipment, etc.; and providing technical assistance to individual NHTSA offices to develop annual business implementation plans to carry out the strategic plan.

FY 1995 Request

Periodic review of emerging trends and their implications for strategic plans is critical to ensuring the continuing effectiveness of an organization. During FY 1993, the agency developed a series of papers that examined issues (demographics, energy and the environment, human resources, etc.) critical to the future of NHTSA and traffic safety. This information provided a basis for the agency's first strategic plan. In FY 1995, a review of strategic issues and plans will be conducted. This project would re-examine the pertinent trends to identify any new challenges and opportunities, and convene senior management retreats to reconsider NHTSA's mission, goals, and strategies. This effort would involve contractor support of approximately $75 thousand.

Innovative organizational structures and management practices can make agencies more efficient, effective, and responsive to their customers. NHTSA began to study its organization and management structure in FY 1993, and developed some proposals for making improvements. In FY 1995, NHTSA would build upon the administration's policy to reinvent government by undertaking a project to perform a more detailed review of innovative practices in both public and private organizations. Their specific applicability to NHTSA would be assessed along with the types of training and staff involvement necessary for a smooth transition to successful new organizational and management strategies. Specific examples include: identifying innovative ways that state- and NHTSA-funded programs can be made more economically self-sufficient; examining how organizations have implemented a teamwork approach to accomplishing tasks; and assessing how organizations have successfully managed change in their organizational culture, structure, and processes. This project would require contractor expenditures estimated to be $75 thousand.

Many new technologies are being developed in national laboratories, universities and industry, that could help address the motor vehicle safety problem. These technologies are often expensive to acquire, test, and implement. Historically, the Federal Government has played a key role in supporting advancements in motor vehicle safety. When faced with financial difficulties, the motor vehicle industry responded by changing many of the methods traditionally used to do business. Consequently, NHTSA must develop mechanisms beyond traditional means to sufficiently support motor vehicle safety research in the future. For example, the National Performance Review recommended that Congress should make a statutory change that would liberalize NHTSA's exemption authority as a means of encouraging safety advances without lengthy, costly, and contentious rulemaking. Other methods, such as funding foundations with resources from industry and the motoring public might also foster safety research programs either in cooperation with NHTSA or independently in coordination with other programs. In FY 1995, a study of the feasibility of various mechanisms for enhancing motor vehicle and traffic safety research will be conducted. The cost of this project is estimated to be $50 thousand.

Accomplishments

- Completed a summary and analysis of comments received in response to the agency's Federal Register notice on strategic planning. This document summarizes comments submitted by over 100 organizations. These comments will support the development of the agency's strategic plan.

- Coordinated NHTSA's participation in the National Performance Review. As part of this effort, the ideas of agency employees were solicited. Numerous ideas on how the Federal Government can become more efficient were identified. The future implementation of ideas pertaining specifically to NHTSA will be coordinated by the Strategic Planning Division.

- Completed several issue papers covering critical areas of future planning. These included issue papers pertinent to traffic safety programs, the motor vehicle industry, energy and the environment, and organization and management.

## PROGRAM DIRECTION AND COORDINATION

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Economic Analysis | $-0- | $100 | $100 |

### Program Objective

The objective of this program is to assess and quantify the economic consequences of injuries which result from motor vehicle crashes.

### Program Description

NHTSA's primary mission is to reduce the injuries and fatalities resulting from motor vehicle crashes. As useful and necessary as tabulating crash results is to NHTSA, it does not by itself provide a complete picture of the consequences of injuries and fatalities on individuals involved in crashes or on society as a whole. Although the number of fatalities resulting from motor vehicle crashes has been reduced, there is some evidence that the number of injuries may be increasing. This program is concerned with measuring the costs and other consequences of motor vehicle injuries and fatalities. The results are used as part of the decision-making process for allocation of agency resources. The results are also applicable to agency regulatory analyses and evaluations, and will enhance NHTSA's understanding of the importance of non-fatal injuries in general.

### FY 1994 Program

The FY 1994 funding request of $100 thousand will provide the anticipated contract costs related to two projects. Of this total, $5 thousand is for mainframe computer time charges in conjunction with the development of the costs of minor and moderate injuries. Current estimates reveal that these injuries result in over 60 percent of the total injury cost due to high incidence, and are likely to be underreported. Particular gaps exist in the costs in emergency departments and private physicians' offices. The project will analyze results of the CODES project -- data from 7 states including EMS reports, emergency department records, hospitalizations, etc. to develop these costs. This effort will be completed in FY 1994. The remaining $95 thousand will fund validation of the Functional Capacity Index. The basic development of this index will be completed in FY 1993 as well as plans for validating the index using clinical data.

FY 1995 Request

Validation of the Functional Capacity Index will continue. The Functional Capacity Index measures the effects of injuries on a person's ability to perform their normal functioning following an injury. This index provides the agency with an additional approach to determining the effects of injury when developing agency priorities, performing regulatory analysis, or in evaluating countermeasures. The basic development of this index was completed in FY 1993 as well as plans for validating the index using clinical data. Validation of the Functional Capacity Index started in FY 1994.

Accomplishments

- Analysis of health care savings resulting from reducing the incidence of motor vehicle injury completed winter 1992-93.
- Comprehensive study of Source of Medical Payments for motor vehicle injuries completed spring 1993.
- Development of Functional Capacity Index completed summer 1993.
- Overall study of Source of Payments for the costs of motor vehicle injuries completed fall 1993.

## PROGRAM DIRECTION AND COORDINATION

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Metric Conversion | $50 | $-0- | $-0- |

### Program Objective

The objective of this activity is to convert all agency programs to the metric system of measurement, including regulations and grant administration.

### Program Description

In response to provisions of the Omnibus Trade Act of 1988, Executive Order 12770 and DOT Order 1021.D, the Department has begun to convert its business activities to the metric system of measurement. To minimize disruption, the conversion is being phased in over a five-year period, with the details tailored to the affected constituencies. Since NHTSA's regulatory responsibilities affect the motor vehicle manufacturers, the guidelines being used in the conversion are those established by the Society of Automotive Engineers (SAE).

### FY 1994 Program

NHTSA will continue to train its staff and to convert motor vehicle safety standards to the metric system. NHTSA will collect crash data in metric units. Funding will not be required for FY 1994.

### FY 1995 Request

Funding is not required for FY 1995.

### Accomplishments

- *Federal Register* notice announced NHTSA's conversion plans on April 21, 1992. Comments were received and analyzed.

- Agency staff training began May 1992, and NHTSA initiated conversion of the Federal Motor Vehicle Safety Standards to the metric system in December 1992.

## HIGHWAY TRAFFIC SAFETY GRANTS PROGRAMS

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## HIGHWAY TRAFFIC SAFETY GRANTS PROGRAM

### SUMMARY STATEMENT

Transportation safety is a key ingredient in the Administration's investment strategy, and basic highway safety grants provided by NHTSA to the State and community safety programs play a major role in improving the effectiveness of countermeasures considered to be the most crucial to improved motorist and pedestrian safety. NHTSA also administers incentive grants to reward States that enact stronger laws and start effective programs to stop drunk and drugged drivers. From FY 1992 through FY 1994, NHTSA is managing the Section 153 incentive grant program to encourage States to enact safety belt and motorcycle helmet use laws, and then to achieve higher use mandated by Congress. Sanctions begin in FY 1995 for States failing to enact the required usage laws. Therefore, NHTSA is not seeking funds for the Section 153 safety belt and motorcycle helmet incentive grant program in FY 1995. All of these national highway safety grants are authorized by the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA/1991), and their funding needs for FY 1995 are presented and justified in this section of the Budget submission to Congress.

The Section 402 State and Community Grant Program provides for a coordinated national highway safety program. Under a formula established by the Highway Safety Act of 1966, all States, the District of Columbia, the Commonwealth of Puerto Rico and the Trust Territories are provided with grants to encourage and facilitate implementation of more effective programs to improve highway safety. The Section 402 program consists of national safety priorities (such as police enforcement, alcohol safety, occupant restraints and emergency medical responses) that incorporate program guidelines required by ISTEA/1991.

NHTSA has administered two incentive grant programs to encourage States to take stronger action to remove impaired drivers from the roads. Funding for Alcohol Safety Incentive Grants (Section 408) was authorized by the Alcohol Traffic Safety Programs Act of 1982. Section 408 and its mission has been continued by the newer Section 410 program. Therefore, NHTSA is not seeking funds for the Section 408 program for FY 1995. Funding for Section 410 Impaired Driving Countermeasures Incentive grants was authorized by the Drunk Driving Prevention Act of 1988. ISTEA/1991 authorized a restructured Section 410 program in order to make the incentive more effective in encouraging State efforts to deter impaired driving. NHTSA is seeking the fully authorized level of funding for FY 1995, due to the unique effectiveness of Section 410 in encouraging States to pass stronger laws and initiate the most effective countermeasures.

ISTEA/1991 authorized Highway Trust Fund support for the National Driver Register (NDR) operations through FY 1994, for the purpose of assisting State transition to the new electronic driver license communications system required by the NDR Act of 1982. The budget request assumes reauthorization for NDR from the Highway Trust Fund. This new system will strengthen State capability to identify problem drivers operating with licenses that have been suspended or revoked for serious traffic offenses such as drunk driving and hit and run.

The FY 1995 NHTSA budget requests $123 million for Section 402 and $25 million for Section 410 grant programs as well as $3.4 million for the National Driver Register.

## HIGHWAY TRAFFIC SAFETY GRANTS

### (LIQUIDATION OF CONTRACT AUTHORITY)

### (HIGHWAY TRUST FUND)

For payment of obligations incurred carrying out the provisions of 23 U.S.C. 153, 402, [406,] 408, and 410, section [2007 of the Intermodal Surface Transportation Efficiency Act of 1991] 211(b) of the National Driver Register Act of 1982, as amended, and section 209 of Public Law 95-599, as amended, to remain available until expended, [$138,550,000] $151,000,000, to be derived from the Highway Trust Fund: Provided, That, notwithstanding subsection 2009(b) of the Intermodal Surface Transportation Efficiency Act of 1991, none of the funds in this Act shall be available for the planning or execution of programs the total obligations for which, in fiscal year [1994] 1995, are in excess of [$163,500,000] $151,400,000 for programs authorized under 23 U.S.C. 402 and 410, as amended, of which $123,000,000 shall be for "State and community highway safety grants", [$12,000,000 shall be for section 153 "Safety belt and motorcycle helmet use" grants, and $3,500,000] $3,400,000 shall be for the "National Driver Register", and $25,000,000 shall be for section 410 "Alcohol-impaired driving countermeasures programs": Provided further, That none of these funds shall be used for construction, rehabilitation or remodeling costs, or for office furnishings and fixtures for State, local, or private buildings or structures: Provided further, That none of the funds in this Act shall be available [for the planning or execution of programs the total obligations for which are in excess of $10,500,000] for "Alcohol safety incentive grants" authorized under 23 U.S.C. 408 or for "Safety belt and motorcycle helmet use" grants authorized under subsection 153(j): Provided further, That not to exceed [$5,153,000] $5,268,000 of the funds made available for section 402 may be available for administering "State and community highway safety grants": Provided further, That not to exceed $500,000 of the funds made available for section 410 may be available for technical assistance to the States: Provided further, That none of the funds in this Act shall be available for the planning or execution of programs authorized under section 209 of Public Law 95-599, as amended, the total obligations for which are in excess of $4,750,000 in fiscal years 1982 through [1994] 1995. (Department of Transportation and Related Agencies Appropriations Act, 1994.)

## NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

## HIGHWAY TRAFFIC SAFETY GRANTS

### Program and Performance Statement

Section 402 formula grants - Grant allocations are determined on the basis of a statutory formula established under 23 U.S.C. 402. States use this funding for reducing traffic crashes, fatalities, and injuries. The grants are used to support State highway safety programs. The States may choose to use the grants to implement programs to reduce deaths and injuries caused by exceeding posted speed limits; encourage proper use of occupant protection devices; reduce alcohol and drug-impaired driving; reduce crashes between motorcycles and other vehicles; reduce school bus crashes; improve police traffic services; improve emergency medical services and trauma care systems; increase pedestrian and bicyclist safety; and improve traffic record systems. The grants also provide additional support for State data collection and reporting of traffic deaths and injuries.

Section 408 incentive grants - The purpose of the Section 408 program is to contribute to highway safety by reducing the number of accidents caused by drivers impaired by alcohol or other drugs. This is accomplished by providing incentive grants to States that adopt tough measures specified by statute. These measures include laws that classify drivers as impaired when their blood alcohol concentration is 0.10 percent; require prompt license suspension for DWI first offenders; impose mandatory sentencing (jail or community service) for DWI repeat offenders; and increase enforcement against drunk and drugged driving.

Section 410 incentive grants - Alcohol-impaired driving countermeasure grants are provided to States that qualify by adopting specified laws and program measures to reduce safety problems stemming from driving while impaired by alcohol and other drugs. Basic grants are issued for achieving criteria that include administrative driver license actions within stated timeframes, lower blood-alcohol content (BAC) laws, statewide police roadside checkpoints, effective under age 21 impairment deterrence, mandatory sentences for repeat offenders, and programs that are financially self-sufficient. Supplemental grants are provided to States that adopt additional specified measures, including .02 BAC laws for under-21 drivers, license plate confiscation, laws against open alcohol containers in vehicles and mandatory BAC testing by police of suspected DWI offenders.

Section 153 incentive grants - Grants are issued to States that qualify by having laws that require the use of safety belts and motorcycle helmets. These States may also receive grants in two subsequent years for achieving belt and helmet use rates specified by statute. These grants must be used by States for programs that educate the public about safety belts, child safety seats and motorcycle helmets, and to support police training and enforcement of use laws and conduct surveys that monitor public compliance with use laws. .

National Driver Register - NDR program funding is provided to improve traffic safety by assisting State motor vehicle administrators in communicating effectively and efficiently with other States to identify problem drivers, i.e., drivers whose licenses are suspended or revoked for certain serious traffic offenses, including vehicle operation under impairment by alcohol and other drugs. States are being encouraged and helped to convert to a new electronic inquiry system required by the National Driver Register Act of 1982. This will provide a more effective system for communicating driver information and, as a consequence, improve State licensing agency decisions on whether applicants should be issued driving permits. This new driver records query system will facilitate rapid and accurate exchange of information between States, and thereby support State decisions on whether to issue a driver license.

## SECTION 402 STATE AND COMMUNITY GRANT PROGRAM

| | FY 1993 | FY 1994 | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Safety Formula Grant Program: | | | |
| Formula Grants | $109,847 | $117,847 | $117,732 |
| Grant Admin. | 5,153* | 5,153* | 5,268* |
| Obligation Limitation | 115,000 | 123,000 | 123,000 |

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* Amount transferred to Operations and Research account.

### Program Objective

The major goal of the Section 402 Program is to provide Federal leadership, encouragement and technical assistance to all States in their efforts to develop and implement the most effective highway safety programs to reduce traffic crashes and resulting deaths, injuries, and property damage. Section 402 enhances State programs by providing seed money to start new, more effective projects; by catalyzing and accelerating State programs to address major safety issues with an improved statewide strategy; and by leveraging additional State and local investment in highway safety. The resulting improvements in States' occupant protection and impairment program effectiveness will make significant contributions in achieving the Secretary's new goals: national safety belt usage of 75 percent and reduction of the proportion of alcohol-related traffic deaths to 43 percent, both by 1997.

Highway safety is a major public health problem in the nation today, and the Section 402 program is a critical asset in the Administration's twin goals of reducing health care costs and reducing the deficit. In 1992, traffic crashes claimed 39,235 lives. The medical costs associated with crash fatalities and injuries in that year alone totalled over $14 billion, or about 2.5 percent of the total national health care costs. Nearly 30 percent of these medical costs are paid from tax dollars. The programs funded under Section 402 result in direct savings in health care cost because they prevent accidents and reduce deaths and injuries.

### Program Description

Section 402 serves as the Federal government's basic formula grant program to support and improve State highway safety activities in National Priority areas. These priorities were determined and are revised through a formal rulemaking process that considers the views of all members of the highway safety community. The national priorities administered by NHTSA are alcohol/drug safety, occupant protection, police traffic services, emergency medical services/trauma care, traffic records, pedestrian/bicycle safety and motorcycle safety. Section 402 also provides funding to support community traffic safety programs and to enhance State data collection and reporting of traffic deaths and injuries.

Section 402 funds are provided to all States, territories, the District of Columbia, and the Secretary of the Interior on behalf of Indian Nations. At least 40 percent of these funds are used for local and community projects. Although Section 402 constitutes less than 3 percent of highway safety funding nationally, it exerts a positive impact that significantly exceeds its size of funding. Section 402 grants are distributed nationwide and have leveraging effects and benefits far beyond their original amount. In FY 1992, NHTSA's enacted level totaled $260.7 million, including Section 402 grant funds to the States. Funds for Section 402 comprised 45 percent of NHTSA's total resources, and Section 402 dollars resulted in potential cost savings attributed to lives saved of $8.8 billion, a benefit cost ratio of over 33:1.

## FY 1994 Program

The enacted Section 402 program level for FY 1994 is $123 million. This represents an increase of $8 million, or almost 7 percent, over FY 1993. Congress has directed that the entire increase be "targeted to measures by the States to minimize underage drunk driving."

Significant cost savings, in terms of a lessened burden on the medical care system and its attendant tax and other costs, will result from an effective traffic safety program. Given the benefits that currently exist because of safer vehicles, the major portion of remaining opportunities in reducing deaths and injuries and their attendant cost will be realized through changes in driver behavior patterns such as drunk driving, driving without safety belts and speeding.

In FY 1994, the Section 402 program will continue to be a major influence nationwide in meeting the Secretary's goals of 75 percent safety belt usage and 43 percent alcohol involvement in fatalities by 1997 and continuing reduction in the traffic fatality rate. Unlike incentive grant programs which only assist a fraction of the country's population, the 402 Program ensures that all States address key highway safety problems that occur, and that these problems are attacked with the most effective countermeasures available nationwide, as developed and tested in the Federal Section 403 Program.

Consistent with Departmental goals and Congressional guidance, $8 million of the FY 1994 Section 402 program has been allocated to youth alcohol initiatives. These funds will supplement and not supplant existing State efforts in this area. In particular, States are planning new efforts in prevention of liquor sales to minors, new training for police and judges in under 21 enforcement, and zero tolerance law development and enforcement.

FY 1995 Request

NHTSA is requesting $123 million for Section 402 in FY 1995. This represents the same level of funding as in FY 1994, but without any earmarking. Although we expect that the States will continue to spend a significant portion of their Section 402 funds on underage drunk driving programs, this program level will also provide funding support for additional critical programs to reduce health care costs and for traffic records programs in support of Safety Management Systems.

Currently, the nation is experiencing life-saving results from the State grant activities. Alcohol-related fatalities dropped from 50 percent of total traffic fatalities in 1990 to 45.8 percent in 1992. This significant drop is due, in large measure, to the efforts of State programs supported in part by Section 402. The safety belt use rate reached 62 percent in 1992, again due to State programs supported by 402 grant funds. Fourteen States exceeded 70 percent belt use, compared to only one State in 1990. The national traffic fatality rate dropped to 1.8 in 1992, the lowest rate on record.

Each percentage of change the States seek to attain in these statistics is more difficult to come by. Those easily subject to change have been convinced. The States task remains to change the behaviors of the "hard-core" -- motorists who are hard to reach and resistant to change. Through increased Section 402 funding, the agency mobilizes the States to use new, effective countermeasures to attack highway safety problems to the benefit of the entire nation.

NHTSA analysis has determined that:

- Increasing safety belt use to 75 percent from the current 62 percent can save an additional 1,850 lives and $700 million in societal costs each year.
- Reducing alcohol related fatalities from 46 percent in 1992 to 43 percent can save an additional 1,800 lives and $400 million in societal costs annually.

These goals can be achieved through effective State laws, enforcement of those laws, and public information and education.

The Section 402 program manages nationwide, at both the State and local levels, to provide effective programs, projects, and coordination that will multiply the Federal efforts to reduce deaths and injuries on our highways. The influence of national guidance and Federal grants provided through Section 402 has produced a significant leveraging effect within the States' highway safety programs. Ongoing highway safety improvements can be expected as public and private sectors continue to unite and escalate their participation in the highway safety arena. Furthermore, the initiation of comprehensive Safety Management Systems in every State, mandated by the ISTEA, requires increased coordination of Section 402 programs with FHWA Federal Aid and Motor Carrier highway safety programs.

The Section 402 program is a major tool in the effort to reduce health care costs and reduce the Federal deficit. The cost/benefit ratio of NHTSA's programs to date clearly indicate that additional dollars in this program will be multiplied many times in terms of the benefits realized.

By funding this program at the level requested, the Department and the Administration will be signaling a true commitment to reducing deaths and injuries on the highways and, at the same time, a true commitment to proven means to reduce attendant costs. Furthermore, this signals a real commitment to the Federal-State partnership by focussing our efforts on the Section 402 program. Unlike our incentive grant programs which have limited grantees and narrow limits on how the funds can be used, Section 402 goes to all States and allows them flexibility in allocating resources. Governed by the national priority areas and influenced by the technical assistance provided by the Section 403 program, States are ready and very willing to direct these funds toward meeting the most beneficial national goals.

## DISTRIBUTION OF SECTION 402 GRANTS
(Dollars in Thousands)

| STATE/TERRITORY | FY 1992 ACTUAL OBLIGATIONS | FY 1993 ACTUAL OBLIGATIONS | Estimated Obligations FY 1994 | Estimated Obligations FY 1995 |
|---|---|---|---|---|
| ALABAMA | $1,948 | $1,895 | $2,041 | $2,039 |
| ALASKA | 564 | 549 | 589 | 589 |
| AMERICAN SAMOA | 282 | 275 | 295 | 294 |
| ARIZONA | 1,554 | 1,536 | 1,652 | 1,650 |
| ARKANSAS | 1,303 | 1,267 | 1,358 | 1,357 |
| CALIFORNIA | 10,835 | 10,561 | 11,336 | 11,328 |
| COLORADO | 1,617 | 1,574 | 1,688 | 1,686 |
| CONNECTICUT | 1,210 | 1,178 | 1,265 | 1,264 |
| DELAWARE | 564 | 549 | 589 | 589 |
| DISTRICT OF COLUMBIA | 564 | 549 | 589 | 589 |
| FLORIDA | 4,968 | 4,851 | 5,210 | 5,205 |
| GEORGIA | 2,874 | 2,801 | 3,005 | 3,002 |
| GUAM | 282 | 275 | 295 | 294 |
| HAWAII | 564 | 549 | 589 | 589 |
| IDAHO | 763 | 740 | 766 | 765 |
| ILLINOIS | 4,671 | 4,545 | 4,875 | 4,870 |
| INDIANA | 2,446 | 2,380 | 2,552 | 2,549 |
| IOWA | 1,689 | 1,642 | 1,759 | 1,757 |
| KANSAS | 1,738 | 1,688 | 1,809 | 1,807 |
| KENTUCKY | 1,686 | 1,640 | 1,773 | 1,771 |
| LOUISANA | 1,783 | 1,734 | 1,860 | 1,858 |
| MAINE | 564 | 549 | 589 | 589 |
| MARYLAND | 1,758 | 1,712 | 1,838 | 1,836 |
| MASSACHUSETTS | 2,197 | 2,140 | 2,295 | 2,293 |
| MICHIGAN | 3,846 | 3,742 | 4,012 | 4,008 |
| MINNESOTA | 2,327 | 2,263 | 2,426 | 2,423 |
| MISSISSIPPI | 1,343 | 1,306 | 1,402 | 1,400 |
| MISSOURI | 2,506 | 2,441 | 2,619 | 2,616 |
| MONTANA | 757 | 732 | 781 | 780 |
| NEBRASKA | 1,158 | 1,127 | 1,207 | 1,206 |
| NEVADA | 709 | 689 | 739 | 738 |
| NEW HAMPSHIRE | 564 | 549 | 589 | 589 |
| NEW JERSEY | 2,757 | 2,683 | 2,878 | 2,875 |
| NEW MEXICO | 875 | 860 | 958 | 957 |
| NEW YORK | 6,636 | 6,458 | 6,928 | 6,921 |
| NORTH CAROLINA | 2,819 | 2,745 | 2,946 | 2,943 |
| NORTH DAKOTA | 811 | 788 | 844 | 843 |
| N. MARIANAS | 282 | 275 | 295 | 294 |
| OHIO | 4,325 | 4,207 | 4,513 | 4,509 |
| OKLAHOMA | 1,803 | 1,757 | 1,883 | 1,881 |
| OREGON | 1,587 | 1,552 | 1,656 | 1,654 |
| PENNSLYVANIA | 4,682 | 4,557 | 4,886 | 4,882 |
| PUERTO RICO | 1,241 | 1,208 | 1,300 | 1,298 |
| RHODE ISLAND | 564 | 549 | 589 | 589 |
| SEC. OF INTERIOR | 564 | 549 | 589 | 589 |
| SOUTH CAROLINA | 1,582 | 1,539 | 1,650 | 1,648 |
| SOUTH DAKOTA | 747 | 784 | 839 | 838 |
| TENNESSEE | 2,178 | 2,120 | 2,275 | 2,273 |
| TEXAS | 7,665 | 7,371 | 7,900 | 7,892 |
| UTAH | 862 | 838 | 899 | 898 |
| VERMONT | 564 | 549 | 589 | 589 |
| VIRGIN ISLANDS | 282 | 275 | 295 | 294 |
| VIRGINIA | 2,487 | 2,422 | 2,600 | 2,597 |
| WASHINGTON | 2,152 | 2,083 | 2,230 | 2,228 |
| WEST VIRGINIA | 825 | 804 | 862 | 861 |
| WISCONSIN | 2,359 | 2,297 | 2,462 | 2,460 |
| WYOMING | 564 | 549 | 589 | 589 |
| UNDISTRIBUTED: ADMIN. COSTS | 5,153 | 5,153 | 5,153 | 5,268 |
| TOTAL | $118,000 | $115,000 | $123,000 | $123,000 |

## SECTION 408 ALCOHOL INCENTIVE GRANTS

| | FY 1993 | FY 1994 | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Alcohol Safety Incentive Grants: | | | |
| Obligation Limitation | $11,000 | $10,500 | $-0- |

### Program Objective

The goal of the Section 408 grant program is to contribute to the reduction of alcohol-related crashes, injuries and deaths by assisting and encouraging States to adopt DWI prevention countermeasures of proven effectiveness, that are specified in Section 408 legislation.

### Program Description

To qualify for a basic Section 408 grant, a State must have in place all of the following laws and programs related to drunk driving: 1) A prompt driver's license suspension or revocation; 2) A law requiring mandatory sentencing of not less than 48 hours in jail or 10 days of community service for any person convicted more than once of driving while intoxicated; 3) A .10 BAC *per se* law; and 4) Increased efforts in police enforcement of alcohol-related traffic laws and increased public information concerning enforcement.

Upon qualifying for a basic grant, a State is eligible for a supplemental grants by implementing a number of additional countermeasures, including prevention and education programs involving youth and parents, limitations on plea bargaining, pre- or post-sentence screening of convicted drunk drivers by courts, and victim assistance programs.

States that continue to show improvement in their alcohol programs are eligible to receive Section 408 basic and supplemental grants for a maximum of five years each, subject to funding availability.

### FY 1994 Program

One new State, Nebraska, received a grant during FY 1993. Thus, by the end of FY 1993, a total of 30 States will have qualified for Section 408 grants. Of those States, 19 completed their fifth year of funding by the end of FY 1993. The budget for FY 1994 will allow subsequent year grants for the remaining States currently eligible for funding. No new States are expected to qualify for the Section 408 program. Four States are expected to complete their fifth and final year of Section 408 eligibility in FY 1994. FY 1994 grant funds will support enhanced State programs and projects to reduce drinking and driving. To maintain Section 408 eligibility each year, States have to strengthen their drunk driving programs, adding new laws or programs and improving existing programs.

The following table provides the actual Section 408 incentive grants for FY 1993 and estimates for FY 1994.

FY 1995 Request

Funds are not requested for FY 1995. Section 410 was passed by Congress in FY 1992 for the purpose of picking up where the ten year old Section 408 program left off -- providing new incentives, new funding, and new eligibility for States' impaired driving programs. By the beginning of FY 1995, a successful transition to Section 410 will be complete. Of the States which are currently qualified for Section 408, only six States are expected to have remaining eligibility at the start of FY 1995. Of these six, three are already receiving Section 410 alcohol incentive grant funding (Hawaii, Nebraska, Wisconsin) and at least one is expected to qualify in FY 1994 (Missouri).

## STATUS OF SEC. 408 OBLIGATIONS

| State | FY 1993 | Expected FY 1994 |
|---|---|---|
| Alabama | | |
| Arizona | $280,565 | |
| California | 4,295,808 | $4,490,817 |
| Colorado | 724,148 | 724,148 |
| Connecticut | | 461,939 |
| Hawaii | | 262,000 |
| Idaho | 375,437 | 375,437 |
| Illinois | 929,649 | |
| Kansas | 820,862 | 328,345 |
| Missouri | 1,198,603 | 1,198,603 |
| Nebraska | 558,310 | 1,116,620 |
| Oklahoma | 858,018 | |
| Oregon | 332,029 | |
| West Virginia | 174,543 | 436,358 |
| Wisconsin | 452,028 | 1,130,069 |
| TOTAL | 11,000,000 | 10,524,336 |

## SECTION 410 ALCOHOL INCENTIVE GRANTS

| | FY 1993 | FY 1994 | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Section 410 Alcohol-Impaired Driving Countermeasures Grants: | | | |
| Grants | $22,883* | $24,500 | $24,500 |
| Technical Assistance | 150* | 500 | 500 |
| Obligation Level/Limitation | 23,033* | 25,000 | 25,000 |

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* Obligations funded from carryover of "old 410" appropriations and carryover of "new 410" Federal-Aid Highways account in FHWA.

### Program Objective

The Section 410 program was authorized by Congress to stimulate further innovation and more effective State and local programs to prevent impaired driving. At the end of FY 1994, the Section 408 program will be completed and Section 410 will be the key incentive program to institute activities needed to combat the nation's serious problem with drunk/drugged drivers.

The Section 410 program has provided incentives to States to implement innovative strategies to reduce drunk and drugged driving. Increases in the number of States passing Administrative License Revocation Laws, .08 BAC laws, and .02 BAC laws can be attributed in large measure to a desire to qualify for these incentive funds.

### Program Description

To receive grants under the Section 410 Program, States must satisfy certain basic criteria, including prompt license suspension, legal blood-alcohol content levels, sobriety checkpoints, self-sustaining community alcohol programs, mandatory sentencing, and control of access to alcohol by youth. Supplemental grant funding is available to States that meet additional criteria, including .02 BAC laws for drivers under age 21, open container laws, strict drugged driving prevention programs, and mandatory BAC testing programs. Section 410 grants funds may only be used to support programs to reduce impaired driving.

Following enactment of Section 410 in 1988, New Mexico qualified and received funds in FY 1991, and Indiana qualified in early FY 1992. As part of the agency's reauthorization enacted in December 1991, Congress significantly amended the Section 410 program to expand the eligibility criteria and increase the funding authorizations. Further amendments were made in the DOT FY 1993 Appropriations Bill, passed in October 1992, which altered grant eligibility requirements and funding procedures.

### FY 1994 Program

A total of 19 States qualified under the revised regulations of the Section 410 program in FY 1992 (including New Mexico and

Indiana which qualified under "old 410" criteria). An additional five States qualified during FY 1993.

The full authorization level of $25 million was enacted for FY 1994, largely due to the high level of State interest in this program and State success in meeting the new program requirements of the amended Section 410 program. Many States are actively pursuing new or improved laws to reduce drinking and driving, such as administrative license revocation and .08 BAC laws. In FY 1994, the agency is expecting an increase in the number of eligible Section 410 states. As many as 30 States may be qualified by the end of FY 1994.

Congress amended the Section 410 award procedures through provisions in the DOT Appropriations Act for 1993. Beginning in FY 1993, a qualifying State is eligible for a basic grant equal to 30 percent of its FY 1992 apportionment under Section 402 and a supplemental grant equal to 5 percent of its FY 1992 Section 402 apportionment for each supplemental grant criterion which it meets. This change in funding formula increases the incentive grant amounts available to every State. For example, Ohio, which received $595,161 for a basic grant and $45,782 for one supplemental grant in FY 1992, would be eligible for $1,582,973 for a basic grant and $263,829 for one supplemental grant in FY 1993 and later years.

Attached is a table showing actual funding for Section 410 in FY 1993 and estimates of Section 410 funding for FY 1994 and FY 1995. Available funding will be insufficient to give every State its maximum allowable grant. Based on the obligation limit we had for FY 1993, we were able to fund the States at almost 80 percent (contingency column) of their formula calculation. At the $25 million level requested for FY 1994, we anticipate that the 29-30 States expected to qualify will receive approximately 68 percent of their eligible grant amount. At the end of each year, we will proportionately redistribute any remaining balance.

## FY 1995 Request

Consistent with the Secretary's goal to reduce alcohol-involved crashes and desire to increase the safety of U.S. transportation systems, NHTSA is requesting the full authorized amount of $25 million for the Section 410 Alcohol-Impaired Driving Countermeasures Grants. As indicated in the table, the agency estimates that approximately 30-34 States would qualify for Section 410 grants and that States would receive approximately 62 percent of their maximum eligible grant amount. For States receiving a second or subsequent year grant, this may be a reduction of approximately 6 percent from FY 1994, because we are anticipating that 3-4 new States will qualify in FY 1995.

States will use their FY 1995 Section 410 grant funds to support a wide range of anti-drunk and drugged driving countermeasures and programs. Significant program activities include:

- Sobriety checkpoint and/or safety checkpoint programs;
- Alcohol awareness programs that target persons under age 21;
- Drug recognition training programs for law enforcement officers;
- Acquiring videotape equipment for police vehicles and training officers in its use; and
- Assessment and screening programs for drunk driving offenders.

95Budget

## SECTION 410

| STATE | 1993 | | | | Est. 1994 | | | | Est. 1995 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | MAX GRNT | ACTUAL | | | MAX GRNT | CONTING. | | | MAX GRNT | CONTING. |
| | BASIC | SUPPLEMEN | TOTAL | 79.92% | BASIC | SUPPLM | TOTAL | 68% | BASIC | SUPPLM | TOTAL | 62% |
| AK | $206,516 | $34,419 | $240,935 | $192,555 | $206,516 | $34,419 | $240,935 | $162,631 | $206,516 | $68,838 | $275,354 | $169,343 |
| AZ | $568,600 | $189,534 | $758,134 | $605,901 | $568,600 | $189,534 | $758,134 | $511,740 | $568,600 | $189,534 | $758,134 | $466,252 |
| CA | $3,965,520 | $2,643,680 | $6,609,200 | $5,282,073 | $3,965,520 | $3,304,600 | $7,270,120 | $4,907,331 | $3,965,520 | $3,304,600 | $7,270,120 | $4,471,124 |
| CO | $591,911 | $197,304 | $789,215 | $630,741 | $591,911 | $197,304 | $789,215 | $532,720 | $591,911 | $295,956 | $887,867 | $546,038 |
| CT | $0 | $0 | $0 | $0 | $442,911 | $0 | $442,911 | $298,965 | $442,911 | $0 | $442,911 | $272,390 |
| DE | $206,516 | $68,838 | $275,354 | $220,063 | $206,516 | $68,838 | $275,354 | $185,864 | $206,516 | $68,838 | $275,354 | $169,343 |
| DC | $206,516 | $103,257 | $309,773 | $247,571 | $206,516 | $103,257 | $309,773 | $209,097 | $206,516 | $103,257 | $309,773 | $190,510 |
| FL | $0 | $0 | $0 | $0 | $1,818,222 | $909,111 | $2,727,333 | $1,840,950 | $1,818,222 | $909,111 | $1,818,222 | $1,118,207 |
| GA | $0 | $0 | $0 | $0 | $1,051,835 | $350,612 | $1,402,447 | $946,652 | $1,051,835 | $350,612 | $1,051,835 | $646,879 |
| HI | $206,516 | $68,838 | $275,354 | $220,063 | $206,516 | $68,838 | $275,354 | $185,864 | $206,516 | $68,838 | $275,354 | $169,343 |
| IL | $1,709,493 | $854,748 | $2,564,241 | $2,049,341 | $1,709,493 | $854,748 | $2,564,241 | $1,730,863 | $1,709,493 | $854,748 | $2,564,241 | $1,577,008 |
| IN | $895,358 | $298,452 | $1,193,810 | $954,093 | $895,963 | $298,452 | $1,194,415 | $806,230 | $895,358 | $298,452 | $1,193,810 | $734,193 |
| KS | $0 | $0 | $0 | $0 | $635,919 | $211,972 | $847,891 | $572,326 | $635,919 | $211,972 | $847,891 | $521,453 |
| ME | $0 | $0 | $0 | $0 | $206,516 | $103,257 | $309,773 | $209,097 | $206,516 | $103,257 | $309,773 | $190,510 |
| MN | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $851,521 | $141,920 | $993,441 | $610,966 |
| MO | $0 | $0 | $0 | $0 | $917,384 | $152,897 | $1,070,281 | $722,440 | $917,384 | $152,897 | $1,070,281 | $658,223 |
| MT | $277,247 | $0 | $277,247 | $221,576 | $277,247 | $0 | $277,247 | $187,142 | $277,247 | $92,416 | $369,663 | $227,343 |
| NE | $423,743 | $70,624 | $494,367 | $395,098 | $423,743 | $70,624 | $494,367 | $333,698 | $423,743 | $211,872 | $635,615 | $390,903 |
| NM | $193,114 | $434,507 | $627,621 | $627,621 | $320,376 | $213,584 | $533,960 | $360,423 | $320,376 | $213,584 | $533,960 | $328,385 |
| NV | $259,348 | $86,450 | $345,798 | $276,362 | $259,348 | $86,450 | $345,798 | $233,414 | $259,348 | $172,900 | $432,248 | $265,833 |
| NJ | $1,009,052 | $168,175 | $1,177,227 | $940,840 | $1,009,052 | $168,175 | $1,177,227 | $794,628 | $1,009,052 | $168,175 | $1,177,227 | $723,995 |
| NY | $2,428,730 | $0 | $2,428,730 | $1,941,041 | $2,428,730 | $0 | $2,428,730 | $1,639,393 | $2,428,730 | $0 | $2,428,730 | $1,493,669 |
| NC | $1,031,770 | $171,962 | $1,203,732 | $962,023 | $1,031,770 | $343,924 | $1,375,694 | $928,593 | $1,031,770 | $687,848 | $1,719,618 | $1,057,565 |
| ND | $296,705 | $98,902 | $395,607 | $316,169 | $296,705 | $98,902 | $395,607 | $267,035 | $296,705 | $98,902 | $395,607 | $243,298 |
| OH | $1,582,973 | $527,658 | $2,110,631 | $1,686,816 | $1,582,973 | $527,658 | $2,110,631 | $1,424,676 | $1,582,973 | $527,658 | $2,110,631 | $1,298,038 |
| OR | $580,995 | $484,165 | $1,065,160 | $851,276 | $580,995 | $484,165 | $1,065,160 | $718,983 | $580,995 | $484,165 | $1,065,160 | $655,073 |
| PA | $1,713,742 | $571,248 | $2,284,990 | $1,826,164 | $1,713,742 | $571,248 | $2,284,990 | $1,542,368 | $1,713,742 | $856,872 | $2,570,614 | $1,580,928 |
| TX | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $2,805,334 | $0 | $2,805,334 | $1,725,280 |
| UT | $315,662 | $210,440 | $526,102 | $420,461 | $315,662 | $210,440 | $526,102 | $355,119 | $315,662 | $210,440 | $526,102 | $323,553 |
| VA | $910,346 | $151,724 | $1,062,070 | $848,806 | $910,346 | $151,724 | $1,062,070 | $716,897 | $910,346 | $151,724 | $1,062,070 | $653,173 |
| WV | $302,037 | $50,339 | $352,376 | $281,619 | $302,037 | $50,339 | $352,376 | $237,854 | $302,037 | $50,339 | $352,376 | $216,711 |
| WI | $863,369 | $431,685 | $1,295,054 | $1,035,007 | $863,369 | $431,685 | $1,295,054 | $874,161 | $863,369 | $431,685 | $1,295,054 | $796,458 |
| Tech.Asst. | | | | | | | | $500,000 | | | | $500,000 |
| TOTAL | | | $28,662,728 | $23,033,279 | | | $36,203,190 | $24,937,153 | | | $39,824,370 | $24,991,988 |
| APPROP. | | | | $23,033,311 | APPROP. | | | $25,000,000 | REQUEST | | | $25,000,000 |

## SECTION 153 SAFETY BELT AND MOTORCYCLE HELMET INCENTIVE GRANT PROGRAM

| | FY 1993 | FY 1994 | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Belt/Helmet Incentive Grant Program: | | | |
| Obligation Limitation | $12,000 | $12,000 | $-0- |

### Program Objective

The objective of the Section 153 Incentive Grant program is to promote State passage of motorcycle helmet and safety belt use laws, and State compliance with the high levels of usage mandated by statute. Achieving higher safety belt use rates over the coming years is among the Secretary's safety goals for the nation. Increasing safety belt use and motorcycle helmet use are two of the most effective behavior changes the motoring public can adopt for reducing the incidence of death and serious injury from highway crashes, plus their rapidly escalating costs to society and to government provided services.

The incentive grant program established in Section 153 of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 incorporates the concept of rewarding State action for enacting and enforcing improved traffic safety laws. The attention given to rewarding these State efforts, and the additional funding support and program inducements provided by the grant program, will have a significant, positive effect on highway safety.

### Program Description

Section 153 grants are made available to eligible States for the purpose of supporting adoption and implementation of traffic safety programs for the following purposes: (1) education of the public about motorcycle and passenger safety, including motorcycle helmet, safety belt and child restraint use; (2) training law enforcement officers in the enforcement of laws requiring motorcycle helmet and safety belt use; (3) conducting activities to enforce those laws; and (4) monitoring rates of public compliance with those laws. The grant-assisted activities are intended to supplement and support ongoing State programs, including Section 402 grant activities and objectives.

States can receive Section 153 incentive grants for a maximum of three years. First-year grants are authorized for States with laws which require motorcycle helmet use by all operators and passengers and safety belt use by front seat occupants of passenger vehicles.

Second-year grant eligibility requires that States achieve 75 percent compliance with the motorcycle helmet use law and 50 percent compliance with the belt use law in the previous fiscal year. Third-year grant eligibility requires that States achieve 85 percent compliance with the motorcycle helmet use law and 70 percent compliance with the belt use law in the previous fiscal year. Total Federal payment of Section 153 grants over the three years may not exceed 90 percent of each eligible State's respective Section 402 grant in FY 1990.

The transfer provision contained in Section 153 provides that if a State fails to put into effect motorcycle helmet and safety belt use laws before October 1, 1993, that State is subject to having the Secretary transfer obligation authority from certain Federal-aid highway programs to its apportionment under the Section 402 safety program. The transfer will take place in the fiscal year succeeding the year in which the state is in non-compliance.

FY 1994 Program

In FY 1993, 19 States, D.C. and Puerto Rico qualified for Section 153 incentive grants: seventeen second-year grantees and four first-year grantees. During FY 1994, it is anticipated that at least 16 States will qualify and receive Section 153 funds. Approximately, thirteen previously eligible States are expected to meet the compliance criteria -- two for second year grants and eleven for third year grants. Several States which received first year grants in FY 1993 are ineligible for second year grants in FY 1994 because their laws were not in effect for the entire preceding fiscal year. To qualify for the third year of grant funds, States must be able to achieve a 70 percent safety belt use rate. Reaching this high use rate -- even given a statistical margin of error -- is proving more difficult for States than was estimated earlier.

Approximately three first-year States are expected to be eligible for first year grants because of current legislative trends. The Section 153 transfer provision, requiring the transfer of certain highway funds to the Section 402 program in 1995 in States without both belt and helmet use laws, is resulting in passage of fewer State laws than originally anticipated.

By law, States may receive up to 90 percent of their FY 1990 Section 402 apportionment over the three years of the Section 153 incentive program. Based on available funding, 21 percent was awarded to grantees in FY 1992, and 24% in FY 1993.

The FY 1994 level of $12 million will reward States which passed new laws and/or increased their efforts and pushed toward higher use rates. The funds will be directed at new or continuing programs to support safety belt and motorcycle helmet usage. These activities will also help support State efforts to meet the Secretary's announced goal of 75 percent safety belt use by 1997.

FY 1995 Request

The agency is not requesting Section 153 incentive grant funds for FY 1995. The three-year incentive grant portion of the Section 153 program authorized in ISTEA will be completed at the end of FY 1994. The Section 153 transfer program will be in full operation in FY 1995. The first actual transfer of funds from certain highway programs to Section 402 (1½ percent for the 28 States not in compliance at the beginning of FY 1994) will take place at the beginning of FY 1995. States which do not have safety belt and motorcycle helmet use laws in effect by the start of FY 1995 will be identified for a three percent transfer starting in FY 1996. With the "stick" portion of the Section 153 program underway to encourage passage of safety belt and motorcycle helmet use laws, there is no sound rationale for continuing the "carrot" portion.

# NATIONAL DRIVER REGISTER

| | FY 1993 | FY 1994 Request | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| National Driver Register: | | | |
| Salaries and Expenses | $890* | $890* | $890* |
| Contracts | 2,760 | 2,610 | 2,510 |
| Obligation Limitation | $3,650 | $3,500 | $3,400** |

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* Amount transferred to Operations and Research account.
** Assumes reauthorization under the Highway Trust Fund.

## Program Objective

The National Driver Register's objective is to improve traffic safety by assisting state motor vehicle administrators in communicating with other states to identify problem drivers. This helps prevent problem drivers from obtaining multiple licenses and improves the quality of state driver record systems.

## Program Description

The National Driver Register (NDR) is a central repository of information on individuals whose licenses to operate a motor vehicle have been revoked, suspended, canceled, or denied. The NDR also contains information on persons who have been convicted of serious traffic-related violations such as driving while impaired by alcohol or other drugs. State driver licensing officials query the NDR when individuals apply for a license, for the purpose of determining whether driving privileges have been withdrawn by other states. Given that the NDR is a nationwide resource point for driver records from all states, a state driver licensing official need only submit a single inquiry to obtain this information. The information obtained from the NDR assists state driver licensing officials in determining whether or not to issue licenses, and at the same time it improves the state's overall driver record system.

The NDR is converting to a Problem Driver Pointer System (PDPS) for the purpose of improving the timeliness and accuracy of NDR information. The PDPS provides electronic communication capability so that state motor vehicle agencies may receive instantaneous responses to their inquiries. Additionally, under PDPS the NDR file contains only identification data on problem drivers, leaving the substantive data on the driver's license withdrawal or conviction in the states' files. Consequently, when a search of the NDR file identifies a driver in the file, the PDPS "points" electronically to the state that holds the driver's substantive data and causes the data to be transferred electronically from the state holding the driver's records to the state making the inquiry. By receiving the information directly from the state holding the driver's records, the inquiring state is assured of receiving the latest information available on the problem driver.

FY 1994 Program

Funds for FY 1994 will be used to continue the regular operations of the NDR while continuing the PDPS implementation begun in FY 1993. Regular operations consist of computer processing of states' driver licensing inquiries and updates, plus related technical and administrative support, such as programming assistance and staff support. Regular operations also involve processing inquiries from federal agencies that employ individuals to operate motor vehicles as well as certify individuals to operate other transportation conveyances ($1,320 thousand).

PDPS implementation activity in FY 1994 will continue to provide technical and training assistance to states during their transition to the PDPS. A Help Desk, staffed with knowledgeable system professionals, will provide scheduled on-site assistance as well as problem-solving and advice by telephone. NHTSA will continue to make system changes at the NDR central site to accommodate the new PDPS system ($1,290 thousand).

FY 1995 Request

The funds being requested will be used to continue regular daily operation of the NDR and to complete the PDPS implementation. During FY 1995, PDPS implementation will be in its final stages, and the primary activity will be assisting the few remaining states in completing the conversion process, conducting structured system testing, and certifying states as meeting the PDPS participation requirements. The goal for completion of PDPS implementation is April 30, 1995 ($2,010 thousand).

In cooperation with FHWA and AAMVA (American Association of Motor Vehicle Administrators), NHTSA will begin a cooperative review of all state licensing information systems, including the NDR, FHWA's Commercial Drivers License Information System (CDLIS), and AAMVA's Driver License Reciprocity (DLR) system. The review will determine how these systems can best incorporate developing information technology and can best work together to provide seamless service to Federal, state, and private sector users ($500 thousand).

Accomplishments

- Fifty states have established electronic access to the NDR file, which is a major step towards PDPS conversion for states that issue licenses over the counter (as opposed to those states that require a waiting period).

- Approximately 35 states are scheduled to join the PDPS by the end of FY 1994.
- During FY 1993 the NDR processed over 28 million file checks for all users, and this produced over 1.2 million probable identifications. Over 475,000 file checks were processed for Federal agencies that access the NDR for problem driver information.

## STATUS OF SECTION 209 HIGHWAY SAFETY EDUCATION AND INFORMATION

| | FY 1993 Appropriation | FY 1994 Appropriation | FY 1995 Request |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Obligation Limitation (cumulative) | $4,750 | $4,750 | $4,750 |

This education and information program was authorized under Section 209 of the Surface Transportation Assistance Act of 1978. The Act directed the Secretary of Transportation to carry out six pilot projects designed, through the use of television and radio, to develop and evaluate techniques, methods and practices to achieve maximum measurable effectiveness in reducing traffic accidents, injuries and deaths. Funding of $6 million was authorized to carry out a nationwide program to demonstrate the results of the pilot projects. All funds are contract authority.

Obligations for the pilot phase of the program were limited initially to $5 million under the 1984 DOT Appropriations Act. The appropriated level was reduced to $4.75 million pursuant to rescission provisions in the Deficit Reduction Act of 1985.

Section 209 funds were allocated for the award of the following contracts:

| | |
|---|---|
| - Drunk Driving Project | $1,043 |
| - Highway Safety Mass Media Youth Project | 1,044 |
| - Safety Belt/Child Safety Seat Use Demonstration Project | 947 |
| - Public Education and Information Demonstration Project for Emergency Medical Services | 929 |
| - Public Education Demonstration Project by Law Enforcement | 787 |
| TOTAL | $4,750 |

The Budget reflects the current cumulative obligation limitation of $4.75 million for FY 1982 through FY 1995. This will allow no new obligations during FY 1995.

## DEPARTMENT OF TRANSPORTATION
## NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

### OPERATIONS AND RESEARCH

Program and Financing (in thousands of dollars)

| Identification Code 69-0650-0-1-401 | | FY 1993 Actual | FY 1994 Estimate | FY 1995 Estimate |
|---|---|---|---|---|
| Program by activities: | | | | |
| Direct Program: | | | | |
| 00.01 | Rulemaking programs...... | 11,060 | 11,314 | 12,257 |
| 00.02 | Enforcement programs..... | 16,430 | 18,256 | 17,718 |
| 00.03 | Highway safety programs.. | 5,142 | 1,271 | -- |
| 00.04 | Research and analysis.... | 40,307 | 48,545 | 38,337 |
| 00.05 | Office of the Administrator | 3,514 | 2,668 | 2,720 |
| 00.06 | General administration... | 8,099 | 7,633 | 6,711 |
| 00.91 | Total direct program..... | 84,552 | 89,687 | 77,743 |
| 01.01 | Reimbursable program..... | 59,005 | 54,279 | 54,250 |
| 10.00 | Total obligations........ | 143,557 | 143,966 | 131,993 |
| 21.40 | Unobligated balance, available start of year | -16,250 | -13,778 | -- |
| 24.40 | Unobligated balance, available end of year.. | 13,778 | -- | -- |
| 39.00 | Budget authority (gross). | 141,085 | 130,188 | 131,993 |
| | Budget authority: | | | |
| | Current: | | | |
| 40.00 | Appropriation............ | 82,080 | 75,909 | 77,743 |

## DEPARTMENT OF TRANSPORTATION
## NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

### OPERATIONS AND RESEARCH

Program and Financing (in thousands of dollars)

| Identification Code 69-0650-0-1-401 | | FY 1993 Actual | FY 1994 Estimate | FY 1995 Estimate |
|---|---|---|---|---|
| | Permanent: | | | |
| 68.00 | Spending authority from offsetting collections (new) | 59,005 | 54,279 | 54,250 |
| | Relation of obligations to outlays: | | | |
| 71.00 | Total obligations | 143,557 | 143,966 | 131,993 |
| 72.40 | Obligated balance, start of year | 31,268 | 56,289 | 58,702 |
| 74.40 | Obligated balance, end of year | -56,289 | -58,702 | -53,276 |
| 77.00 | Adjustments in expired accounts | -1,684 | -- | -- |
| 87.00 | Outlays (gross) | 116,852 | 141,553 | 137,419 |
| | Adjustments to budget authority and outlays: Deductions for offsetting Collections: | | | |
| 88.30 | Trust Funds | -59,005 | -54,279 | -54,250 |
| 89.00 | Budget authority (net) | 82,080 | 75,909 | 77,743 |
| 90.00 | Outlays (net) | 57,847 | 87,274 | 83,169 |

# DEPARTMENT OF TRANSPORTAION
# NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

## OPERATIONS AND RESEARCH

Object Classification (in thousands of dollars)

| Idntification Code 69-0650-0-1-401 | FY 1993 Actual | FY 1994 Approp. | FY 1995 Estimate |
|---|---|---|---|
| Direct obligations<br>Personnel Compensation: | | | |
| 11.1 Full-time permanent........ | 20,423 | 21,825 | 22,577 |
| 11.3 Other than full-time permanent............... | 1,527 | 1,173 | 1,180 |
| 11.5 Other personnel comp....... | 454 | 469 | 485 |
| Total personnel compensation............ | 22,404 | 23,467 | 24,242 |
| 12.1 Civilian personnel benefits | 4,236 | 4,141 | 4,168 |
| 21.0 Travel and transportation of persons............... | 261 | 309 | 352 |
| 22.0 Transportation of things... | 111 | 83 | 95 |
| 23.3 Communications, utilities, and miscellaneous charges | 1,424 | 1,328 | 1,480 |
| 24.0 Printing and reproduction.. | 2,306 | 771 | 856 |
| 25.2 Other services............. | 42,837 | 45,589 | 46,325 |
| 26.0 Supplies and materials..... | 6,031 | 89 | 93 |
| 31.0 Equipment.................. | 4,942 | 132 | 132 |
| 99.0 Subtotal, direct obligations.............. | 84,552 | 75,909 | 77,743 |
| 99.0 Reimbursable obligations... | 59,005* | 54,279* | 54,250* |
| 99.9 Total obligations.......... | 143,557 | 130,188 | 131,993 |

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*Reimbursables are displayed on separate pages in more detail.

# DEPARTMENT OF TRANSPORTATION
# NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

## OPERATIONS AND RESEARCH
## (HIGHWAY TRUST FUND)

Program and Financing (in thousands of dollars)

| Identification Code 69-0650-0-1-401 | | FY 1993 Actual | FY 1994 Estimate | FY 1995 Estimate |
|---|---|---|---|---|
| | Program by activities: | | | |
| | Direct Program: | | | |
| 00.01 | Highway safety programs.. | 35,043 | 34,431 | 34,381 |
| 00.02 | Research and analysis.... | 8,322 | 10,878 | 10,587 |
| 00.03 | Office of the Administrator | 939 | 936 | 997 |
| 00.04 | General administration... | 1,886 | 1,991 | 2,127 |
| 10.00 | Total Obligations........ | 46,170 | 48,236 | 48,092 |
| | Budget authority: | | | |
| | Current: | | | |
| 40.00 | Appropriation........... | 46,170 | 48,236 | 48,092 |
| | Relation cafe obligations to outlays: | | | |
| 71.00 | Total obligations........ | 46,170 | 48,236 | 48,092 |
| 72.40 | obligated balance, start of year................ | 56,344 | 60,867 | 53,942 |
| 74.40 | Obligated balance, end of year................ | -60,867 | -53,942 | -46,109 |
| 90.00 | Outlays (net)........... | 41,647 | 55,161 | 55,925 |

# DEPARTMENT OF TRANSPORTAION
# NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

## OPERATIONS AND RESEARCH

## (TRUST FUND REIMBURSABLE)

Object Classification (in thousands of dollars)

| Idntification Code<br>69-0650-0-1-401 | FY 1993<br>Actual | FY 1994<br>Approp. | FY 1995<br>Estimate |
|---|---|---|---|
| Direct obligations<br>Personnel Compensation: | | | |
| 11.1 Full-time permanent........ | 10,464 | 10,284 | 10,785 |
| 11.3 Other than full-time permanent................ | 563 | 553 | 580 |
| 11.5 Other personnel comp....... | 225 | 221 | 232 |
| Total personnel compensation............ | 11,252 | 11,058 | 11,598 |
| 12.1 Civilian personnel benefits | 1,575 | 1,951 | 2,047 |
| 21.0 Travel and transportation of persons............... | 432 | 416 | 425 |
| 22.0 Transportation of things... | 47 | 47 | 39 |
| 23.3 Communications, utilities, and miscellaneous charges | 750 | 747 | 612 |
| 24.0 Printing and reproduction.. | 380 | 181 | 354 |
| 25.1 Consulting services........ | 0 | 0 | 0 |
| 25.2 Other services............. | 31,617 | 33,732 | 32,507 |
| 26.0 Supplies and materials..... | 50 | 50 | 38 |
| 31.0 Equipment.................. | 67 | 54 | 54 |
| 99.0 Total obligations.......... | 46,170 | 48,236 | 48,092 |

## DEPARTMENT OF TRANSPORTATION
## NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

## MISCELLANEOUS SAFETY PROGRAMS

Program and Financing (in thousands of dollars)

| Identification Code 69-0650-0-1-401 | | FY 1993 Actual | FY 1994 Estimate | FY 1995 Estimate |
|---|---|---|---|---|
| | Program by activities: | | | |
| 10.00 | Total obligations (object class 41.0).... | 10 | 6 | -- |
| | Financing: | | | |
| 21.40 | Unobligated balance available, start of year | -16 | -6 | -- |
| 24.40 | Unobligated balance available, end of year.. | 6 | -- | -- |
| | Relation of obligations to outlays: | | | |
| 71.00 | Total obligations........ | 10 | 6 | -- |
| 72.40 | Obligated balance, start of year.......... | 5,434 | 189 | -- |
| 74.40 | Obligated balance, end of year............ | -189 | -- | -- |
| 90.00 | Outlays.................. | 5,256 | 195 | |

This schedule displays the following programs funded by State and community highway safety: Territorial Grant and Transportation Systems Management. These programs no longer require appropriations. Obligation and outlay amounts shown reflect spend-out of prior year appropriations.

# DEPARTMENT OF TRANSPORTATION
# NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
## HIGHWAY TRAFFIC SAFETY GRANTS
## (LIQUIDATION OF CONTRACT AUTHORITY)
## (HIGHWAY TRUST FUND)

| Identification Code 69-8020-0-7-401 | | FY 1993 Actual | FY 1994 Estimate | FY 1995 Estimate |
|---|---|---|---|---|
| | Program by activities: | | | |
| 00.01 | Section 402 formula grants................. | 115,000 | 123,000 | 123,000 |
| 00.02 | Section 408 incentive grants................. | 11,000 | 10,500 | -- |
| 00.03 | Section 410 incentive grants................. | -- | 25,000 | 25,000 |
| 00.04 | Section 153 incentive grants................. | 12,000 | 12,000 | -- |
| 00.05 | National Driver Register. | 3,650 | 3,500 | 3,400 |
| 10.00 | Total obligations........ | 141,650 | 174,000 | 151,400 |
| | Financing: | | | |
| 17.00 | Recovery of prior year obligations............ | -891 | -- | -- |
| 21.49 | Unobligated balance available, start of year: contract authority | -168,434 | -198,675 | -220,675 |
| 24.49 | Unobligated balance available, end of year: contract authority | 198,675 | 220,675 | 265,275 |
| 39.00 | Budget authority......... | 171,000 | 196,000 | 196,000 |
| | Budget authority:<br>Current: | | | |
| 40.00 | Appropriation............ | 150,000 | 138,550 | 151,000 |
| 40.49 | Portion applied to liquidate contract authority..... | -150,000 | -138,550 | -151,000 |

# DEPARTMENT OF TRANSPORTATION
# NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
## HIGHWAY TRAFFIC SAFETY GRANTS
## (LIQUIDATION OF CONTRACT AUTHORITY)
## (HIGHWAY TRUST FUND)

| Identification Code 69-8020-0-7-401 | | FY 1993 Actual | FY 1994 Estimate | FY 1995 Estimate |
|---|---|---|---|---|
| 43.00 | Appropriation (total)..... | -- | -- | -- |
| | Permanent: | | | |
| 69.10 | Contract authority (P.L. 102-240, P.L. 102-388). | 171,000 | 196,000 | 196,000 |
| | Relation of obligations to outlays: | | | |
| 71.00 | Total obligations........ | 141,650 | 174,000 | 151,400 |
| | Obligated balance: Start of year: | | | |
| 772.40 | Appropriation............ | 16,979 | 29,952 | 28,086 |
| 72.49 | Contract authority....... | 99,596 | 90,355 | 125,805 |
| | Obligated balance: End of year: | | | |
| 74.40 | Appropriation............ | -29,952 | -28,086 | -29,854 |
| 74.49 | Contract authority....... | -90,355 | -125,805 | -125,805 |
| 78.00 | Adjustments in unexpired accounts............... | -891 | -- | -- |
| 90.00 | Outlays.................. | 137,027 | 140,416 | 149,632 |
| Distribution of budget authority: | | | | |
| | Section 402 formula grants.. | 143,000 | 143,000 | 167,600 |
| | Section 410 incentive grants | -- | 25,000 | 25,000 |
| | Section 153 incentive grants | 24,000 | 24,000 | -- |
| | National Driver Register.... | 4,000 | 4,000 | 3,400 |
| Distribution of outlays: | | | | |
| | Section 402 formula grants. | 120,586 | 115,691 | 117,719 |

# DEPARTMENT OF TRANSPORTATION
# NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
# HIGHWAY TRAFFIC SAFETY GRANTS
# (LIQUIDATION OF CONTRACT AUTHORITY)
# (HIGHWAY TRUST FUND)

| Identification Code 69-8020-0-7-401 | FY 1993 Actual | FY 1994 Estimate | FY 1995 Estimate |
|---|---|---|---|
| Section 408 incentive grants | 15,820 | 12,346 | 7,295 |
| Section 410 incentive grants | -- | 3,750 | 12,250 |
| Section 153 incentive grants | 131 | 5,880 | 8,400 |
| National Driver Register.... | 490 | 2,749 | 3,968 |
| Safety Education and Information.............. | -- | -- | -- |
| Status of Contract Authority (in thousands of dollars) | | | |
| Unfunded balance, start of year.. | 264,023 | 285,023 | 342,473 |
| Contract authority (P.L.102-240; P.L. 102-388)... | 171,000 | 196,000 | 196,000 |
| Appropriation to liquidate contract authority............ | 150,000 | 138,550 | 151,000 |
| Unfunded balance, end of year.... | 285,023 | 342,473 | 387,473 |

## DEPARTMENT OF TRANSPORTAION
## NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

## OPERATIONS AND RESEARCH

## (TRUST FUND REIMBURSABLE)

Object Classification (in thousands of dollars)

| Idntification Code 69-0650-0-1-401 | FY 1993 Actual | FY 1994 Approp. | FY 1995 Estimate |
|---|---|---|---|
| Direct obligations | | | |
| Personnel Compensation: | | | |
| 11.1 Full-time permanent......... | 4,827 | 4,605 | 4,703 |
| 12.1 Civilian personnel benefits | 676 | 813 | 830 |
| 21.0 Travel and transportation of persons............... | 210 | 250 | 250 |
| 25.2 Other services............. | 330 | 375 | 375 |
| 99.9 Total obligations.......... | 6,043 | 6,043 | 6,158 |

TUESDAY, APRIL 12, 1994.

## RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION

### WITNESSES

**ANA SOL GUTIÉRREZ, ACTING ADMINISTRATOR**

**LOUISE FRANKEL STOLL, ASSISTANT SECRETARY FOR BUDGET AND PROGRAMS**

**ROSE A. McMURRAY, CHIEF OF STAFF**

**C.S. (ROCKY) SHIH, ASSOCIATE ADMINISTRATOR FOR RESEARCH TECHNOLOGY AND ANALYSIS**

**ALAN ROBERTS, ASSOCIATE ADMINISTRATOR FOR HAZARDOUS MATERIALS SAFETY**

**GEORGE TENLEY, ASSOCIATE ADMINISTRATOR FOR PIPELINE SAFETY**

**RICHARD JOHN, DIRECTOR, VOLPE CENTER**

Mr. COLEMAN [presiding]. The Subcommittee will come to order. Today we will hear testimony on the fiscal year 1995 budget request of the Research and Special Programs Administration.

The Research and Special Programs Administration is a multimodal operating administration with diverse duties and responsibilities. Its jurisdiction includes the regulation of hazardous materials across all transportation modes, pipeline safety, research and technology coordination, aviation statistics and tariff management and emergency preparedness for the Department. RSPA's fiscal year 1995 budget estimate is $59.956 million, which is an increase of $5.2 million above the fiscal year 1994 level.

### OPENING REMARKS

Mr. COLEMAN. We are pleased to welcome the Acting Administrator and new Deputy Administrator of RSPA, Ms. Ana Sol Gutiérrez, in her first appearance before the Subcommittee. We will make your prepared statement a part of the hearing record, and you may summarize your statement. We will move on to questions following your statement.

Ms. GUTIÉRREZ. Thank you. I am Ana Sol Gutiérrez. I am Acting Administrator of the Research and Special Programs Administration. Thank you for this opportunity to appear before you today on the Research and Special Programs Administration's proposed budget for 1995.

This is my first appearance before this Subcommittee, and I am pleased to talk with you about the key elements of our budget and the important activity it supports. I do have a brief statement to make before I proceed.

I would like to introduce my colleagues at the table.

On my left is Rose McMurray, my Chief of Staff.

To her left is George Tenley, Associate Administrator for Pipeline Safety; and next to him is Alan Roberts, Associate Administrator for Hazardous Materials Safety.

On my right is Louise Frankel Stoll, Assistant Secretary for Budget and Programs; and to her right is Dr. Rocky Shih, Associate Administrator for Research Technology and Analysis; and to his right is Dr. Richard John, Director of the Volpe Center.

### RSPA OVERVIEW

Our fiscal year 1995 budget is built, to a great extent, around the primary emphases contained in Secretary Peña's Strategic Plan for the Department of Transportation. In concert with many of the themes in that strategic plans, our priorities include an accelerated focus on environmental protection and programs to revitalize the economy for defense conversion efforts and technology enhancement.

At the same time, RSPA has taken seriously the President's direction to carefully review all of our programs to ensure that they are effective and necessary. Based upon the results of RSPA's review, we are recommending curtailment of one program and a significant downsizing of another.

For fiscal year 1995, RSPA presents a budget request of $60 million, an increase of overall budget authority of $5.2 million over the fiscal year 1994 enacted level. Still, RSPA's total fiscal year 1995 budget authority request is less than two-tenths of 1 percent of the Department's total budget request and is offset 55 percent by user fee collections.

### PROGRAM DOWNSIZING

First, I would like to address our proposal to downsize two of RSPA's programs. Two DOD/RSPA review teams which analyzed the airline tariff filing program concluded that the current operations were inefficient and a major downsizing of the office was possible without sacrificing the program's primary mission: the review and the approval of international tariff rates changes. We proposed to implement program changes over a two-year period beginning in fiscal year 1995 by using current technology and maximizing automation to the greatest extent possible.

In addition, we propose no funding for activities associated with the Sanitary Food Transportation Act. The SFTA program is outside our core mission and diverts valuable resources from programs that are part of our mission. Savings from our proposal include four positions in fiscal year 1995 and one position in fiscal year 1996.

### PIPELINE SAFETY FUNDING REQUEST

RSPA is requesting a $1.8 million increase in the pipeline safety program, including grants, for fiscal year 1995. I have become acutely aware of the critical nature of this increase. Since I became Acting Administrator, I have attempted to learn the substantive process of the pipeline safety program presently, but the Edison, New Jersey, explosion brought it all into sharp focus. The issues and the resolution are multifaceted and multidimensional, and I am struck by the enormous challenge facing us in taking responsibility for improving the pipeline infrastructure. We must carefully deploy our resources to address this promptly.

Our challenge includes defining, understanding and managing the potential risks of the vast pipeline infrastructure on people and the environment, and we must accept the concept of risk management as our approach.

The budget I present today is the first step in improving our capability to define the problem. Of the requested 1.8 million, the lion's share goes to better defining and prioritizing the pipeline safety problem so that our choices of solutions are based on facts.

Also, $0.5 million is requested for safety pipeline safety grants authorized under the Natural Gas Pipeline Safety Act and the Hazardous Liquid Pipeline Safety Act. In exchange for this incentive for the States, RSPA expects States to improve program performance through adoption of Federal regulations and to take over safety jurisdiction of all intrastate pipelines. Additionally, we expect several new States to join the program as a result of our outreach efforts.

Funds are also requested for hiring three inspectors as part of RSPA's new responsibility to oversee low-stress hazardous liquid pipelines and for upgrading our risk management and remedial testing program.

### RSPA R&D REQUEST

In the area of R&D, an increase of $0.7 million is requested to be directed to defense conversion, outreach, coordination and intermodal studies.

Among our specific activities in fiscal year 1995 will be: one, directing resources of defense-oriented Federal agencies into transportation projects such as the Technology Reinvestment Project, the Advanced Technology Program and Cooperative Research and Development Agreements; and, two, analyzing and identifying promising technologies with cross-modal applications such as those used in the Intelligent Vehicle Highway Systems, Global Positioning Systems, High–Speed Ground Transportation, Partnerships for a New Generation of Vehicles and new shipbuilding initiatives.

I wish to note also that though the research of our Volpe National Transportation Systems Center continues to be in high demand, we anticipate meeting this demand with existing resources.

### RSPA EMERGENCY TRANSPORTATION PROGRAM

As you know, Mr. Coleman, RSPA serves as the Department's emergency coordinator for the Secretary. Disasters such as the Los Angeles earthquake in January of this year—my first day on the job, by the way—the Midwest floods of 1993, Hurricane Andrew and others have been devastating. Emergency cooperation has been made especially difficult due to the data capability of the equipment in the main Crisis Management Center located in DOT headquarters.

To ensure an appropriate emergency response capability we are requesting an increase of $0.4 million to upgrade the voice communication and information systems of the CMC. The upgrade will provide better and faster access to critical information on the status of transportation systems and relief requirements, thereby improving decision making by the Secretary and crisis managers charged with serving the needs of those affected by the emergency.

In view of the challenges ahead, I ask for the subcommittee's continued support in removing the current reprogramming restrictions on RSPA. In my capacity as Acting Administrator, I have come to understand the difficulties placed on management by such restrictions, and the removal would enhance our flexibility in implementing our many programs.

In conclusion, I would like to stress that RSPA has been mindful during the preparation of this budget to respond to the clear priorities of the administration and Congress. I believe we have developed a budget which reflects the administration's policies, yet recognizes the restraint and limitations of the government's role envisioned by the President.

Although our funding levels make RSPA one of the smallest agencies in DOT, we will propose to downsize and eliminate two programs. We must request modest increases, however, in our high priority areas: safety, technology, and the environment. We believe this budget will provide the resources necessary to support our program and their mission.

Thank you again for allowing RSPA to explain its 1995 budget proposal. My colleagues and I are happy to answer any questions you may have.

Mr. COLEMAN. Thank you very much for your testimony.

[The prepared statement and biography of Ms. Sol Guitiérrez follows:]

# STATEMENT OF ANA SOL GUTIERREZ, ACTING ADMINISTRATOR
# RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION
# DEPARTMENT OF TRANSPORTATION
# BEFORE THE SUBCOMMITTEE ON TRANSPORTATION
# OF THE
# HOUSE APPROPRIATIONS COMMITTEE
# APRIL 12, 1994

Mr. Chairman and members of the Subcommittee:

I am Ana Sol Gutiérrez, Acting Administrator of the Research and Special Programs Administration. Thank you for the opportunity to appear before you today on the Research and Special Programs Administration's (RSPA) proposed budget for FY 1995. This is my first appearance before your subcommittee and I am pleased to talk with you about the key elements of our budget and the important activities it supports.

RSPA has given considerable attention to the priorities of the Administration and Congress and has targeted specific programs for emphasis. Our FY 1995 budget is built, to a great extent, around the primary emphases contained in Secretary Peña's Strategic Plan for the Department of Transportation. In concert with many of the themes in that strategic plan, RSPA's priorities include an accelerated focus on environmental protection and programs to revitalize the economy through defense conversion efforts and technology enhancement. At the same time, RSPA has taken seriously the President's direction to carefully review all our programs to ensure they are effective and necessary. Based upon the results of RSPA's review, we are recommending elimination of one program and a significant downsizing of another.

For FY 1995, RSPA presents a budget request of $60 million, an increase in overall budget authority of $5.2 million over the FY 1994 enacted level. This budget reflects RSPA's priorities and its ability to deliver critical transportation safety, environmental protection and research programs. Still, RSPA's total FY 1995 budget authority request is less than two tenths of one percent of the Department's total budget request, and is offset 55 percent by user fee collections.

The budget addresses several RSPA priorities. Foremost is the request for $21.2 million for pipeline safety which builds on the Administration's emphasis on managing the safety and environmental risks inherent in the transportation of hazardous liquids and natural gas by pipeline. Our efforts in this area reinforce two goals in the Secretary's strategic plan: 1) promoting safe and secure transportation, and 2) actively enhancing our environment through wise transportation decisions. Of the requested $21.2 million, $8 million is for pipeline grant funds to support State programs, an increase of $0.5 million. Increases in this area are entirely offset by user fees. Two other increases support programs of interest to the Administration. We are requesting a $.6 million increase to strengthen Departmental management of research and development which focuses on the broad DOT strategic planning goal to create a new alliance between the nation's transportation and technology industries. A requested $.4 million increase will be used to improve and modernize Departmental emergency transportation response capabilities and addresses the Department's goal to put people first by making our transportation system relevant and accessible to users.

## RSPA's Achievements in FY 1993

RSPA was involved in several important activities during FY 1993 that have helped to shape our program for the future.

As you may know, Mr. Chairman, last year's Colonial pipeline spill in Reston, Virginia served to focus our attention on our emerging environmental protection mandate. Consequently, we are conducting an in-depth internal analysis of our pipeline safety program and are directing efforts to create the appropriate balance between our historical public safety mission and our emerging and demanding environmental safety mission. Based on this internal analysis, we have developed a wide-ranging action plan which includes (1) five accelerated rulemakings, (2) promotion of comprehensive one-call programs, (3) increased liquid pipeline inspections, including increased inspections of new construction, (4) outreach to the States to increase their participation in the Federal/State partnership, and (5) aggressive implementation of the Oil Pollution Act. The requested increase in the grant program will help to stimulate this increased participation by existing state agencies as well as new ones.

Research and development efforts in FY 1993 focused largely on planning and preparing for defense conversion activities to transportation applications. A major effort included increased activity in the Department's Navigation Council which resulted in the establishment of a joint DOT/DOD task force to examine the dual-use technology of the Global Positioning System (GPS). This will assure that the Federal Government's investment in GPS reaches maximum application in the civil sector.

In response to the Midwest floods and the Los Angeles earthquake, RSPA's small emergency staff directed a massive Departmental response effort to assist communities and citizens whose transportation systems were affected by these catastrophic events.

FY 1993 was the inaugural year for disbursements of emergency preparedness planning and training grant funds by the Office of Hazardous Materials Safety. These grants are a major step in assisting States, Territories and Indian Tribes to be better prepared to respond to accidents involving hazardous materials.

## RSPA's Plans for FY 1994

In FY 1994, RSPA is focusing on a number of priorities. I have noted above the action plan resulting from the pipeline safety program review, implementing requirements of the Oil Pollution Act (OPA) of 1990, and completing the Office of Pipeline Safety risk-based prioritization plan. Now we are looking at actions resulting from last month's explosion of a natural gas transmission line in Edison, New Jersey.

We are currently devoting most of our Eastern Region pipeline safety staff and some Headquarters personnel to a thorough investigation into the pipeline's failure. We are working closely with State officials to perform a comprehensive review of all interstate natural gas transmission lines in New Jersey. We are providing funding to the New Jersey Institute of Technology to investigate the impact of urban development encroaching on natural gas pipelines. We are also convening a safety summit with national experts to investigate and make recommendations on how we can live safely with the aging pipeline infrastructure. We know this is extremely important and we are devoting resources to the maximum extent possible to address these important safety issues.

Our important research and technology initiatives in FY 1994 include assisting in the production of the FY 1994 Radionavigation Plan, and increasing outreach efforts with DOD and the transportation industry to strengthen DOT ties for defense conversion projects. RSPA, through its Volpe Center, is ensuring there is sustained aggressive Departmental involvement in the Technology Reinvestment Project (TRP). Of the $800 million awarded in TRP grants, $420 million are directly related to transportation, much of which is managed by the Department.

In the area of hazardous materials transportation, we are working with Congress to reauthorize the hazardous materials transportation program. As part of DOT's strategic plan, we also will be leading Departmental activities to improve safety in hazardous materials transportation.

## **RSPA's FY 1995 Agenda**

Following a review of RSPA programs, RSPA intends to modernize and downsize its Office of Automated Tariffs and curtail program activities under the Sanitary Food Transportation Act of 1990

(SFTA). Both proposals are reflected in the FY 1995 budget request. In addition to the decreases, we are requesting modest increases for Pipeline Safety grants, research planning and monitoring, and emergency preparedness activities.

**Program Reductions:** Two DOT/RSPA review teams which analyzed the airline tariff filing program concluded that current operations were inefficient and a major downsizing of the office was possible without sacrificing the program's primary mission - the review and approval of international tariff rate changes. Using current technology and maximizing automation to the greatest extent possible, the downsized program would operate with one program manager (in contrast to a current total of 12 staff) augmented by contract support. We propose to implement this program change over a two-year period, beginning in FY 1995.

In addition, we propose no funding for activities associated with SFTA. The SFTA program is outside our core mission, and diverts valuable resources from programs that are part of that mission. Savings from our proposal include four positions in FY 1995 and one position in FY 1996.

**Pipeline Safety:** RSPA is requesting a $1.8 million increase in the pipeline safety program (including grants) for FY 1995. The requested funds will enhance the public and environmental safety aspects of the pipeline safety program. This directly supports the strategic plan subgoal to "significantly improve the safety of transporting hazardous materials on our air, water, surface and pipeline transportation network."

Of the increase, $.5 million is for State pipeline safety grants authorized under the Natural Gas Pipeline Safety Act and Hazardous Liquid Pipeline Safety Act. These Acts allow RSPA to reimburse up to 50% of the costs incurred by State pipeline safety programs. Appropriated amounts for these grants have never been sufficient to reimburse the States the full 50%. Many States have difficulty implementing a complete program due to lack of the full Federal contribution. In exchange for this incentive of increased funding to States, RSPA expects States to improve program performance through adoption of Federal regulations and to take over safety jurisdiction of all intrastate pipelines. Additionally, we expect several new states to join the program as a result of our outreach efforts.

Funds are also requested for 1) hiring three inspectors as part of RSPA's new responsibility to oversee low-stress hazardous liquid pipelines, 2) automating risk-related information systems and developing a risk-related data base, and 3) contracting for witnessing of remedial tests required as part of compliance actions, such as hazardous facility orders and new construction inspections. As we move to increase our inspection efforts as part of an overall strategy to improve the environmental integrity of hazardous liquid pipelines, these resources become critical.

**Management of Transportation Research and Technology:** An increase of $.7 million is requested to be directed to defense conversion, outreach, coordination, and intermodal studies. The Administration is committed to ensuring that technology is a key to this country's economic growth. RSPA has the responsibility to help implement the Department's strategic plan, particularly to develop an approach to apply advanced technology and materials in the manufacturing and constructing of transportation equipment and facilities.

Specific activities in FY 1995 will include 1) preparation of the Department's Surface Transportation R&D Plan, 2) directing resources of defense oriented Federal agencies into transportation projects such as the Technology Reinvestment Project, the Advanced Technology Program, and Cooperative Research and Development Agreements, 3) analyzing and identifying promising technologies with cross-modal applications such as Intelligent Vehicle Highway Systems, Global Positioning Systems, High-Speed Ground Transportation, Partnerships for a New Generation of Vehicles, and new shipbuilding initiatives, and 4) expanding our outreach to transportation users by initiating interaction prior to, and after, the conduct of research and fostering linkages between academic researchers and industrial developers.

In support of the President's technology policy, coordination efforts will be expanded to ensure that the Department's R&T is focused on the highest priority and most productive areas as identified by the President, that research results are easily transferred to ultimate users, that outreach activities are increased, and data-gathering and sharing with key components of the transportation industry become an integral part of our work.

I wish to also note that though the research of our Volpe National Transportation Systems Center continues to be in high demand, we anticipate meeting this demand with existing resources.

**Emergency Preparedness Grant Program:** We are proposing a limitation on the amounts available in FY 1995 for emergency preparedness grant and support activities. A total of $11.75 million is requested for appropriation from the amounts made available for planning and training grants, state monitoring, administration and curriculum development.

**Emergency Transportation:** Disasters have increased over the past decade, with the most costly natural disasters in American history occurring in the last two years alone. The Los Angeles earthquake of January 1994, the Midwest floods of 1993, Hurricane Andrew and other disasters brought to a standstill nearly every transportation system in the affected areas. RSPA is the Secretary of Transportation's emergency coordinator and, as such, is responsible for the management of multi-modal transportation emergency activities. Emergency coordination has been made especially difficult due to the dated capability of the equipment in the main Crisis Management Center (CMC) located in the DOT Headquarters Building. To ensure an appropriate emergency response capability, we are requesting an increase of $.4 million to upgrade the voice communications and information systems of the CMC. Included in this upgrade will be an evaluation of ways to better integrate into the CMC the communication capabilities of the United States Coast Guard and the Federal Aviation Administration. The upgrade will provide better and faster access to critical information on the status of transportation systems and relief requirements, thereby improving decisionmaking by the Secretary and crisis managers charged with serving the needs of those affected by the emergency. These actions are representative of our efforts, as part of the Department's strategic plan, to coordinate disaster relief plans that restore mobility and commerce to users in an effective and efficient manner.

## Conclusion

RSPA has been mindful during the preparation of this budget to respond to the clear priorities of the Administration and Congress. I believe we have developed a budget which reflects the Administration's policies, yet recognizes the restraint and limitation of the Government's role envisioned by the President. Although our funding levels make RSPA one of the smallest agencies in DOT, we are proposing to downsize and eliminate two programs while requesting modest increases only in high-priority areas affecting safety issues, technology, or the environment. We believe this budget will provide us with the resources necessary to support our programs and their missions.

**ANA SOL GUTIERREZ**

Deputy Administrator

**Type Appointment:** Senior Executive Service
Non-Career

**Education:**

M.S., The American University (1975)

B.S., Pennsylvania State University (1964)

International Studies: University of Geneva, Switzerland

Post-Graduate Studies: George Washington University

**Professional Experience:**

| | |
|---|---|
| Jan/1994-<br>Present | Deputy Administrator, Research and Special Programs Administration |
| 1992-1994 | Senior Consulting Engineer/Operations Manager, Computer Sciences Corporation, Rockville, MD |
| 1988-1992 | Senior Systems Engineer, Loral Aerospace (formerly Ford Aerospace), Seabrook, MD |
| 1986-1988 | Senior Associate, Booz, Allen & Hamilton, Inc., Bethesda, MD |
| 1982-1986 | Technical Department Manager, Computer Sciences Corporation, Calverton, MD |
| 1981-1982 | District Technical Support Manager, Wang Laboratories, Inc., Bethesda, MD |
| 1978-1981 | International Management Consultant in Latin America, Caracas, Venezuela; La Paz, Bolivia; Lima, Peru |
| 1978-1980 | Associate Professor, Department of Mathematics and Computer Sciences, Universidad Mayor de San Andres, La Paz, Bolivia |
| 1976-1978 | Director, Technical Information Services Department, INTEVEP -- Venezuelan Petroleum Research Institute, Caracas, Venezuela |
| 1975-1976 | Associate Professor, Mathematics Department, Universidad Simon Bolivar, Caracas, Venezuela |
| 1970-1975 | Information Scientist, Herner and Company, Washington, DC |
| 1967-1970 | Editorial Assistant, American Chemical Society, Washington, DC |

**Honors and Awards:**

Member, Board of Education, Montgomery County (MD) Public Schools, Elected 1990-1994

Member, Governor Schaefer's Commission on Hispanic Affairs, Maryland

Member, Senator Mikulski's Academy Review Board and Hispanic Advisory Committee, Maryland

Hispanic Achievement Award in Science, Hispanic Magazine, 1993

Named One of 100 Most Influential Hispanics in U.S.A., Hispanic Business Magazine, 1991

Finalist for 1991 Outstanding Engineer Award for Community Service, Society for Hispanic Professional Engineers

## CONTRACTUAL SERVICES

Mr. COLEMAN. In reviewing your fiscal year 1995 budget justifications I noticed several instances where RSPA proposes to contract out certain functions. For example, secretarial services for hazardous materials field offices, pipeline inspections, the airline tariffs filing program, the processing of Freedom of Information Act requests, and personnel classification audits and reviews are proposed to be contracted out.

In short, it appears that you are relying more and more on contractual arrangements to provide basic services. I think that on this Committee there are different views, and some held very strongly, concerning contracting out. I think most of us would agree that it is good if it is shown that a service can be provided more efficiently and cheaply in that manner. I wonder whether or not you have conducted the analyses to determine whether or not it is actually costing the government more, and not less, to contract out these services, or are you simply reacting to restrictions on personnel levels imposed on you by budget constraints?

Ms. GUTIÉRREZ. Yes, indeed. I had the same type of concerns when I first arrived at RSPA. I have been there now 90 days so it is not a long period of observation, but I am convinced that we do have in place the appropriate processes for review before we contract out.

Our contracting is limited to not the primary governmental services but support services. And what I have found is that we have truly been able to leverage the very small contracting dollar amounts that we do have to make them most efficient and to let us then invest those resources where we really do need them.

For example, in the area of support offices—of support for our field offices, there is clerical support that allow our inspectors to have more time out on the field doing their hands-on activity.

If there is some additional information that you would like to provide, Rose, on the ways the DMA has set up those control processes, I think that those are the key for our not contracting out before we have done a thorough review of what is the intent and the purpose of that contract.

Ms. MCMURRAY. As the Acting Administrator pointed out, we have looked at this issue very carefully and are very sensitive to striking the right balance between contracting out and having basic services delivered by Federal employees.

None of the contracting services that we do have are inherently governmental. They are all well within the law and parameters regarding what can be contracted out.

We do have our Chief of Contracting who examines each and every contracting out proposal to ensure that, in fact, it is proper and meets guidelines. Our total amount of contracting out is something around 11 percent, which when compared to other government agencies I think is very modest.

But I think that the basic reply is that we are satisfied that our internal control systems are adequate to ensure that we are striking that proper balance.

## CONTRACTING OUT PIPELINE INSPECTIONS

Mr. COLEMAN. I think those are going to be some very tough lines to draw. For example, pipeline inspection comes to mind. Please describe to me how you determined that pipeline inspections should be contracted out.

Ms. GUTIÉRREZ. Yes, Mr. Coleman. I think that is a very good example because it shows how they can leverage the resources for that location when it is necessary to have some on-site inspection. George Tenley.

Mr. TENLEY. Mr. Chairman, one of the motivations behind this request—and we have been not been in the business of using contracting services to support us—was the Colonial accident last March. We have spent more than three person years on the Colonial accident in the Eastern Region alone. Much of that is field time. And, given the other responsibilities in our regional office, its takes a great deal of time away from our inspection to witness all the remedial tests that goes on. We would like to be able to provide that oversight while retaining the responsibility for decision making and actions with the operator that we might find.

I see this as an attempt to see how well will it work out for us in the future. It is not a large request, but it will focus on how we can best use our inspectors.

On new construction there is some concern coming out of the Colonial accident that there is some problem that Colonial may have created itself when it first laid the pipeline. And from the inspections of the last couple of years you can learn a lot from being in the ditch when the pipeline is laid. Again, it is time consuming. When a pipeline is laid, many pipelines are laid at one time. It is hard to be at all places at the same time to see welding going on or valves being installed.

This would give us more eyes and ears with which to make decisions about that pipeline. I think it can be effective and, with the controls Rose mentioned, I think we can do it well.

## CONTRACTUAL SERVICES

Mr. COLEMAN. I think it is important to provide the personnel to do the job right for what a lot of people understand to be very important safety concerns. Ultimately, if and when failures occur and tragedies take place, we have great cost to the taxpayer.

You mentioned the earthquake. I noticed a report in the news concerning how rapidly the Interstate 10 highway is being repaired and the reasons for that rapid response. I kept saying tax dollars. The appropriation of money went very rapidly. It is always interesting to note that we all of a sudden neglect the fact that that is what we are talking about. When we hire enough people to do the job and do it right, I think we can see savings.

On the other hand, if we don't have enough personnel to do our job, I think we shortchange ourselves in the end. Those are issues that we need to be concerned about.

Now, more permanent inspectors, and more personnel in the government doing that job, may not necessarily be the most economical way to accomplish the task. But, at the same time, I hope that you are doing the proper analysis of alternatives. I hope that your agency especially is taking the time to give us a valid cost analysis of potential savings. I say that understanding that some criteria may not be in the mix.

You have heard criticisms from other government employees, as I have, that maybe we are not putting all cost factors in that mix when we talk about the cost of contracting out. For example, national security clearance cost have not been added in some instances where they should have been in some contract proposal I have reviewed. On the other hand, if you already have government employees who have received the clearance, those costs do not need to be included.

I use that just as an example. It may not apply to anything that your agency does. On the other hand, it may indeed.

But, I would hope that in doing those cost analyses you are able to defend them because those issues will become more and more important over time.

Ms. MCMURRAY. We also tend to use task order contracting which tends to be cheaper in the long run because we only utilize private sector support when it is needed and at the time that it is needed so we are not carrying the salaries and overhead that we might with government employees. We will continue to monitor that and to be sure that we are getting the best bang for the buck.

### R&D COORDINATION RESPONSIBILITIES

Mr. COLEMAN. Please explain how the RSPA administrator's responsibility as an advisor to the Secretary on scientific and technological matters in the Department differs from that of the director of technology deployment?

Ms. GUTIÉRREZ. I would be very happy to, sir. This is one area very close and dear to my heart.

I see that DOT is making an enormous change in the way that the—the role that R&D is playing within the overall Department. I think—particularly from the outside looking at government, DOT was never one of the premiere drivers of R&D. And with the initiatives from President Clinton as well as from the Secretary R&D has now become a very high priority within DOT.

In response to that, it is evident that whatever infrastructure, whatever way we had previously of coordinating R&D is not going to be sufficient. There is a lot happening out in the R&D world with the defense conversion, TRP efforts, lots of new initiatives and dollars that happily are being oriented towards what is being called the transportation enterprise, not necessarily Transportation Department.

And to step up to the plate and to have the influence, the leadership, the guidance in taking full advantage, I think, of the new R&D initiatives, I feel that the Secretary has put in place an improved structure. And we are evolving to be able to have a number, a greater depth, I think, in how we effectively deal with the R&D structure.

Saying that, the Secretary, in order to have greater visibility for his particular interest in R&D, has created the position of the Director of Technology Deployment primarily to do the external, the outreach, the being one among others who, in the R&D world, at the interagency level, and that has been a function that I think we had not ever done as effectively as we now need to.

RSPA had traditionally had a more coordinating review effort among the different modes. What is a clear realization, I believe now in DOT, is that we must move away from those smokestacks and from those views of R&D that are uniquely highway or uniquely FAA in that we really do need to do a better job of bringing our R&D priorities into clear perspective across DOT. I believe that we are well on our way to do that. There is a new steering committee at the highest levels of administrators as well as members of the Office of the Secretary, that will be, through consensus and through discussion, coming up with the priorities that are going to lead the R&D efforts of the Department.

So what I think was the administrator of RSPA's traditional role has to change because the ball game has changed. The amount of work has changed. And the need for greater integration in the Department and a greater visibility at the secretarial level, I think, are driving those forces of change. So I hope that that response to your——

### DUPLICATION OF R&D COORDINATION

Mr. COLEMAN. Since we have that new director of technology deployment, how can we be certain that your activities and that new director are nonduplicative?

Ms. GUTIÉRREZ. I think it is nonduplicative because there is a lot to do and we are working very closely together. The Director and I are constantly in touch and planning our activities for supporting the Secretary.

### R&D STEERING COMMITTEE

Mr. COLEMAN. What are the purposes of the new steering committee established by Deputy Secretary Downey to oversee research planning and development activities in the Department? Who is on the committee.

Ms. GUTIÉRREZ. That is the Committee that I mentioned was composed at the highest level by the administrators and by the Office of the Secretary.

### NATIONAL COUNCIL ON SURFACE TRANSPORTATION RESEARCH

Mr. COLEMAN. How will its activities differ from that of the National Council on Surface Transportation Research authorized under ISTEA?

Ms. GUTIÉRREZ. This Committee has a view of all the DOT modes. It includes both the surface modes as well as every other mode.

Mr. COLEMAN. The question I am asking is how are you coordinating R&D efforts?

I have to parenthetically say I am one Member of Congress who has been disappointed in the position of my colleagues with respect to research and development as an issue per se—the idea of superconducting supercollider, the space station, NASA research, and defense technologies. The statement I hear constantly is "we can't afford it"—meaning we, the United States, the taxpayers. As a Nation, we are just not capable of doing research and development any more, especially if it looks costly and long term and you can't point to anything and see what we built with your taxpayers' dollars. R&D does not lend itself to that kind of a statement.

So I just want to be absolutely certain that when we defend research and development we are able to say, yes, we have clear delineations of authority. We know where our dollars are going. We know what each of them is doing. I was wondering whether or not you will be able to describe to us how all the different research activities, for example, of this new steering committee differ from the National Council on Surface Transportation Research authorized under ISTEA.

Ms. GUTIÉRREZ. Primarily I think it is an internal DOT committee, but Louise wanted to make a comment on that.

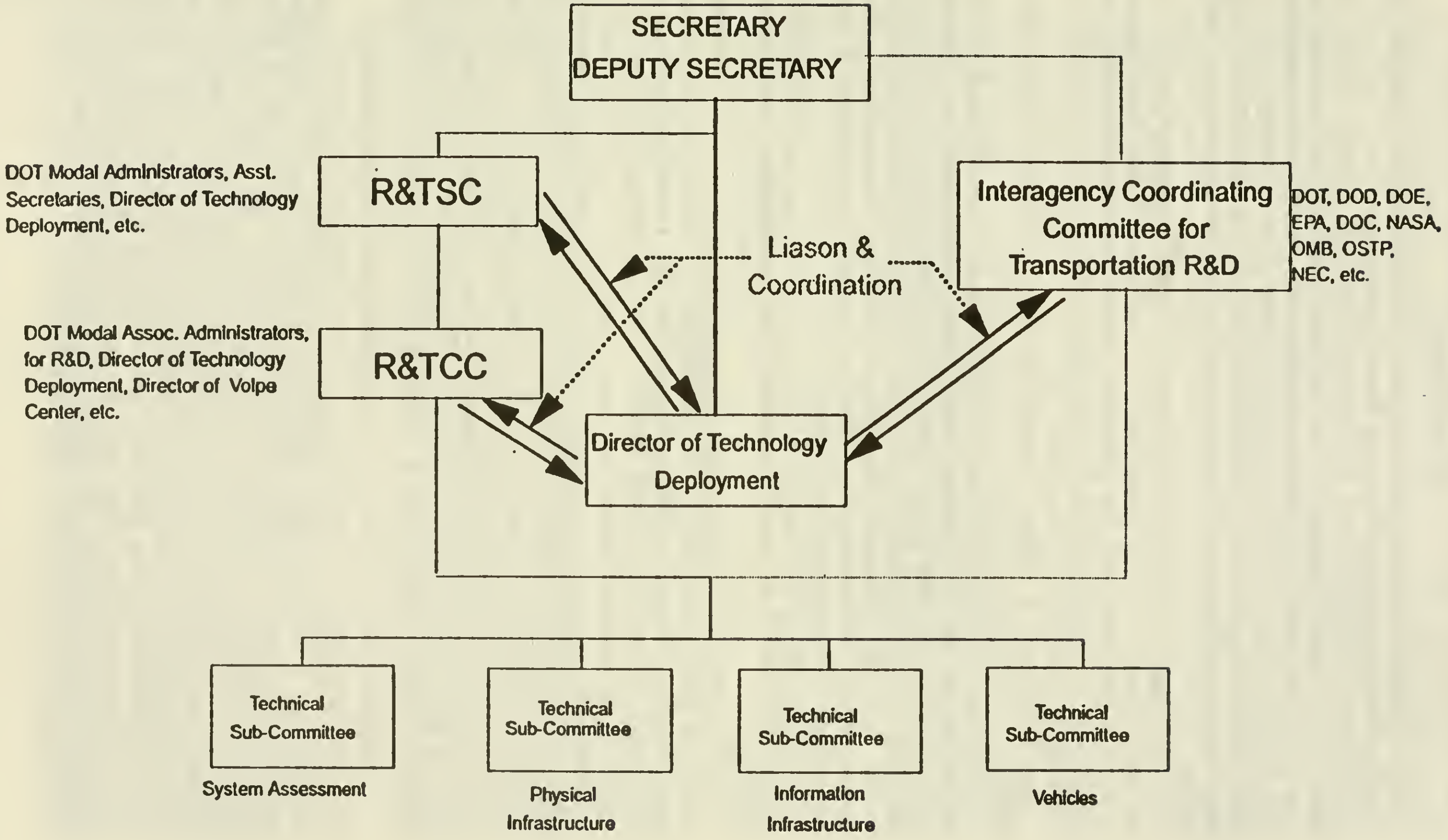
Ms. STOLL. We at the Department share your view that there is probably nothing more important than being sure that research and technology development moves forward in this government in a coherent and structured way. This is a statement of the administration, of the President, of the Cabinet. How it gets translated into the agencies is an interesting and complicated problem.

I would say that at this point there are a number of loci of activity, and that we discerned in our Department the need for additional high-level coordination. For instance, in the Department of Transportation there is approximately $700 million being proposed for spending across all of the modes in research and development. In addition, as a consequence of the White House effort at coordinating research, we learned that there is close to $3 billion of transportation-related research going on in the Federal Government, almost half of it in the Department of Defense and some of it in other agencies, in Commerce, in Energy and so forth.

What has evolved in the administration—and it is evolving—is serious coordinating efforts to be sure that we are not all tripping over each other, to be sure that there are clearly defined statements of who is doing what. In the Department of Transportation, the Deputy, Mort Downey, has taken a primary role in seeing that this is happening. By appointing a special science advisor to the Secretary at the top level, we have given high visibility to the entire issue.

How this is relating to all of the other existing R&D efforts in the Department is not absolutely pristine at this point, but we are definitely working to rationalize it. And I would be pleased to get to you the closest thing we have to an organization chart that would define how this works. We are intent that it is a coordinated effort and that we are not tripping over each other as we move forward.

[The information follows:]


SECRETARY
DEPUTY SECRETARY
DOT Modal Administrators, Asst. Secretaries, Director of Technology Deployment, etc.
R&TSC
DOT Modal Assoc. Administrators, for R&D, Director of Technology Deployment, Director of Volpe Center, etc.
R&TCC
Liason & Coordination
Interagency Coordinating Committee for Transportation R&D
DOT, DOD, DOE, EPA, DOC, NASA, OMB, OSTP, NEC, etc.
Director of Technology Deployment
Technical Sub-Committee
System Assessment
Technical Sub-Committee
Physical Infrastructure
Technical Sub-Committee
Information Infrastructure
Technical Sub-Committee
Vehicles

## NATIONAL COUNCIL ON SURFACE TRANSPORTATION RESEARCH APPOINTMENTS

Mr. COLEMAN. Have the members of the National Council on Surface Transportation Research been appointed?

Mr. SHIH. Congressman, we have an internal council called the R&D Coordinating Council. That has been serving that purpose for the ISTEA Council. But there is another called the Intermodalism Commission that has been appointed, and then, however, this research technology steering committee basically is the top level administration committee to coordinate the intradepartmental R&D effort.

It determines the visions, the policy and the budgetary decisions on R&D, then it will be delegated—I mean that all the R&D executive type decisions will be delegated down and carried out by the R&D Coordinating Council. I think that is the Council basically reflecting to your ISTEA Council.

Mr. COLEMAN. I think it would be very important to get that chart.

I have got to tell you that around here we are required to get authorization for the various committees within agencies. I think a lot of times we are better leaving it to the experts to determine the best way to do these things. Yet, authorized in the ISTEA legislation was the National Council on Surface Transportation Research, and I am wondering whether or not the members of that committee have yet been appointed.

Mr. SHIH. We don't have that Council yet, but we do have similar things like we do have one intermodalism commission already appointed.

Ms. GUTIÉRREZ. I believe that Michael Huerta, the Associate Secretary of Intermodalism, is the coordinator of that Council, but we can provide that information for you for the record as well as a functional organization chart of how we are coordinating this.

[The information follows:]

The National Council on Surface Transportation Research was created as a study group reporting to the Congress by Section 6010 of the Intermodal Surface Transportation Efficiency Act of 1991. It was to be a seven member group, with three members appointed by the President, and four members appointed by the Congress. According to the Committee Management Officer in the Office of the Secretary, DOT is unaware of any attempts by the Congress to activate the Council. As such, DOT has not initiated any unilateral efforts on its part to propose candidates for appointment by the President, since the Cojncil as a whole has never been activated. Should this situation change, DOT of course will fulfill its statutory responsibilities.

## ADMINISTRATION'S EFFORTS TO IMPROVE R&D COORDINATION

Ms. GUTIÉRREZ. Let me mention that one of the very exciting things that I see certainly happening is that, from the President on down, the focus of R&D is having a new structure put in place under the Science Advisor to the President, Dr. John Gibbons. There is a whole new set of committee structures that focus in different areas with the intent—and there is one, for example, for Transportation—the intent of these committees is to look across the interagencies, come together, and establish a set of priorities of R&D. These priorities, then, will be used through the budget guidance documents so that we can begin to prioritize across agencies the areas where we want to focus R&D efforts.

I think that that was a long time coming, to have a better planned, integrated approach for spending the R&D dollar, and particularly for getting the best leverage out of the defense conversion, the dual use-type dollars that are now going to be available.

Mr. COLEMAN. You are requesting an $810,000 appropriation, which is 10 times the amount in the previous year, to fund cross-cutting inter-modal transportation research and studies.

We need to have a rationale for why RSPA would actually conduct research studies to better manage research activities within the Department. I am sure that you have reasons for that, but your rationale needs to be spelled out. You can do that for the record.

Ms. GUTIÉRREZ. Certainly, we will be happy to provide as much detail on that as you need.

[The information follows:]

There are several reasons for the conduct of such studies:

1. RSPA needs a technical and analytical base to support its own role in the Departmental R&D management process.
2. RSPA provides the analytical support to the Department's various research coordination bodies, including the Research and Technology Steering Committee, the Research and Technology Coordinating Council, and the National Science and Technology Council's Interagency Coordinating Committee on Transportation R&D.
3. RSPA provides the Department with options for cooperative ventures and interactions with other agencies, particularly in the context of defense conversion. Much of the Department's credibility for incorporating specific topics into the Technology Reinvestment Program will have to come from such analyses.
4. RSPA applies special studies to support its own strategic planning process and, more broadly, to support strategic planning on technical issues throughout the Department.

As the only intermodal operating administration, RSPA can conduct and apply such studies without fear of being considered "biased" by other specific mode oriented operating administrations.

## UNIVERSITY RESEARCH

Mr. COLEMAN. I want to move into the issue of university research. University research is one of the areas that, generally speaking, a lot of us support because we believe that there we gain several things from it, provided the system that is utilized for the decisions on selecting universities is one that is credible and defensible.

The GAO has underway at our request a study reviewing the Department's oversight and management of university research. The GAO's preliminary research suggests that there is a lack of oversight, monitoring, and coordination of university research throughout the Department. The amount of university researcy funded is approximately $50 million annually.

I would like to know whether or not that is a proper area for the Research and Development Coordinating Council to review, and whether or not such a review is within your plans?

Ms. GUTIÉRREZ. Within RSPA we have already taken some measures to address those GAO concerns. There has been a thorough review of the ways that the university grants programs and the centers were functioning, and it is evident to me that we have tightened up significantly on our definition and our criteria for both the work that is allocated—

What I am looking forward to doing is making the university research program come directly within this R&D priority approach for not only DOT but really to serve the national priorities. In other words, rather than have it as an independent program on the side where it is funding some research, that we ensure that that research is going to be along those higher technology priorities that have been identified for transportation use.

We have tightened up quite a bit on the site visits and on the review of the ongoing programs, and my Associate Administrator for Research and Analysis is taking hands-on review processes. He went down to Texas to review the program down there. And maybe, Rocky, you would like to add some of the additional efforts that you plan on taking?

Mr. SHIH. Congressman, I am also from the University of Texas, and we are trying to tie all of these programs together. As you probably know that RSPA is only in charge of 13 university centers, six university research institutes, total funding of that around 22 million. That is all. So there is a larger portion of the research centers that is not within RSPA jurisdiction. And we are trying to—pushing for some integrated effort to get all the university R&D plans and put them together.

And, at the same time, we are trying to coordinate tracking of all the research projects and to make sure they have appropriate duplication, checking and verification processes, whereas at the same time they would not have an overabundance on some specific software development.

I also went through many different university programs, including California and Texas, and tried to persuade them, not only pushing the software-oriented type of research. They also need to get on more hardware-oriented research and to basically reflect the Secretary's strategic plan on both R&D initiatives and the President's education initiatives.

Mr. COLEMAN. I think that the view of this Subcommittee is that perhaps this agency should better manage those research funds. I know that requires people, time and all the rest. But I have got to tell you I would love to see a proposal to this subcommittee so that you can do that.

How many transportation research centers did we authorize?

Mr. SHIH. Ten for the university research centers and three additional special earmarked centers for ISTEA—13.

## MANAGEMENT OF UNIVERSITY TRANSPORTATION CENTERS

Mr. COLEMAN. Do you feel that RSPA is adequately managing those funds?

Mr. SHIH. We are trying to do our best job to manage them, but right now we are developing a database to make sure that everything can be automatically monitored. But we, of course, would like to have more staff support because we only have four positions within the entire program.

Mr. COLEMAN. I think the great fear that a lot of agencies have is that you can't make a proposal that adds more people. It doesn't matter if it saves us $20 billion. Ten more people. We are just not going to add them. Does that make sense? I am exaggerating, of course.

But, I think we have got to say that honesty is the best policy in this area. What you need to do is to develop a scenario in which you have discussed and analyzed it. You have asked OMB about it. You have asked are these costs valid? Then come to us and tell us.

I don't care if OMB doesn't like it. I have to tell you that my experience in Congress has only been for the last decade. OMB directors come and go. I know what OMB's role is. But, we have to respond to the taxpayers who are legitimately asking us whether you are managing the program correctly. We can't answer that question and you can't answer that question unless you have the data to manage the program correctly.

You need to tell us what kind of scenario it is that will provide you with the ability to truly manage that funding. I think it is going to become more and more important over time.

We continue to say one of the statements that this President has made twice at States of the Union speeches—we know where we are headed. We know what we have got to do with respect to overall funding. We have got to do a better job than we have done before.

If that means that we are going to have to have personnel, I think those are legitimate questions for us to deal with. Are we willing to go to the taxpayer and say this is funding that means something down the line, or is it not worth worrying with? We will just continue down the path we have gone. The savings may not be that great, but at least let's begin the process of trying to do our best job to see to it that you have the personnel necessary to do a credible job.

I continue to repeat I don't think R&D money is going to be available in the amounts it has been in the past. Everybody can say it will be. I don't believe that. I base that statement on discussions with colleagues, and on recent votes in the Congress. I can tell you it is going to get more difficult. I don't think it is going to get easier.

So, we have to be able to answer those hard questions. That is the reason that I would appreciate your delineating that as part of this overall thing on this whole R&D question.

We will be submitting a series of questions for the record. I hope you will pull those R&D questions and assign somebody to answering those questions.

What would be needed to do a better job and to answer the hard questions on R&D? If more people is the answer, then say it. It may not be. Sometimes it is not. You may need a position or some positions that are filled with individuals with different educational backgrounds. Sometimes, that is helpful.

I have taken issue with the fact that many times we have had centers that were authorized by ISTEA that have a history of working with the research consortia of historically black colleges and universities. I have always said that those consortia are good, but those of us who represent major minority institutions that are Hispanic were not included. I would like a record of your activities that encourage initiatives for further inclusion, not exclusion.

But that, again, is a small part of a larger issue of whether we are ensuring that research opportunities are provided for universities. Are we wasting money in that? If so, we ought to say so. Are there areas where we have had duplication? If so, we ought to say so, and we need to eliminate that duplication.

If you don't have the people, if you don't have the time, or if you don't have the necessary resources to do that kind of analysis, we need to know that. And you need to tell us—is it important or not? I think we have to answer some basic questions before we go down a path of providing more resources.

Ms. GUTIÉRREZ. I welcome your invitation and opportunity to provide you that kind of review and recommendation. This is an area that is near and dear to my heart, the whole educational aspect and potential that is inherent in this effort.

I do believe that we already have an infrastructure to better serve the rest of the department. We have been able to put together conferences. We know how to do that. We know how to put out RFPs and how to evaluate. I think it makes a lot of sense to build that kind of expertise and serve the Department. I will be looking at the whole program and providing as soon as we get back some additional thoughts on this issue. Thank you.

[The information follows:]

Research and Special Programs Administration (RSPA) shares your concern that future competitive awards of grants under the university transportation centers program (UTC) reflect the broadest possible participation. To this end, we have published notices of the forthcoming recompetition of the regional UTC grants not only in the Commerce Business Daily but also in the Chronicle of Higher Education. RSPA intends to give careful consideration to every proposal which meets the minimum qualification criteria set forth in the statute. Since responsibility for the program was transferred to RSPA, increasing emphasis has been placed on diversity as one of the six key goals of the program. Therefore all successful applicants will be expected to establish and maintain the relationships that will enable them to fulfill that goal.

## VOLPE CENTER MISSION

Mr. COLEMAN. Let me move on to the Volpe National Transportation Systems Center. The Volpe Center has broad authority to conduct R&D analysis and to advance transportation research and technology issues. The role has changed over the years to meet changing national priorities and needs in transportation. I wonder if you would summarize for us the administration's vision of how the Volpe Center fits within the Department's overall research and development strategy.

Ms. GUTIÉRREZ. I would be happy to.

I see the Volpe Center as being the gem that we have in transportation to help us achieve those challenges in the R&D area. They have been a premier technical and systems center, and I see them playing a very important role. They have been playing a very important role as we have seen this change in the R&D arena that has come under the new administration.

What I propose to do is to do an evaluation of the Center's mission and its business plan, which has now been available for a few years. 1992, I believe, was their last business plan. I will—we need to look again at what has been the operational focus of the Center, what has been its mission, and see do we need to reorient that closer towards the R&D priorities of the transportation issues. And are we doing that as effectively as we possibly can?

I would like to have Dr. John maybe respond how he has been able to participate with the Volpe Center in direct support for the DOT R&D efforts.

Mr. JOHN. As you mentioned, the Center, because of its broad charter, basically is trying to respond to changing national priorities. Over the last year or so, increasingly, our mix of work has turned more toward surface transportation, particularly in support of FTA and FHWA. We are also doing more work in terms of supporting outside agencies such as the Department of Energy and EPA.

Our work for DOD transportation logistical problems, which we had done a lot of in the mid-1980s, has now leveled off; the growth area now is work pertaining to surface transportation.

The other thing that we have been doing for the past year—and, in fact, since this administration came in—is we have been taking the lead, I would say, in supporting the Department, getting increasingly involved in the DOD ARPA Technology Reinvestment Project and the Department of Commerce's Advanced Technology Program.

But I think, essentially, that the Volpe Center is the one place in the Department where all the facets of R&D come together. It is the one place in the Department where research and development is performed for all the modes.

## VOLPE CENTER ACTIVITIES

Mr. COLEMAN. Apparently, the Volpe Center broadly defines its role and its mission, and includes within that mission such activities as planning meetings and compiling information needed by the modal administrations.

An announcement appeared in the trade press about a series of workshops arranged by the Volpe Center for the FHWA Office of Motor Carriers for the purpose of soliciting views on how to improve FHWA motor carrier safety rating process. At best, this particular project may involve some program analysis and, at worst, the project simply involves planning and organizing a series of workshops.

Mr. JOHN. I think this is one of the questions that will have to be considered when we relook at the mission—indeed, since we have been handling outreach for DOT customers, including the Secretary.

In general, what we do is prepare technical background papers and white papers and reach out to the community to see what their views are. We have thought in the past that, in essence, this was a valuable function the Center is serving. But, again, when we relook at the mission in light of the Secretary's strategic plan we could rethink whether we should be doing that sort of work.

## VOLPE CENTER INSPECTOR GENERAL AUDIT

Mr. COLEMAN. The Volpe Center should examine whether or not those modal administrations themselves could not do some of that same work.

Mr. JOHN. Yes, sir.

Mr. COLEMAN. I would hope that you could define that and make sure that in answering any of the questions that will be submitted for the record that you address that particularly. I appreciate your response.

As you know, the Inspector General has underway an audit that may have some critical findings about the Volpe's project acceptance procedures. The IG reviewed 181 Department of Transportation projects accepted by Volpe during the 1990–1992 period and identified a number of projects where it appears that the Center did little more than contract out the work without adding any real value or research expertise.

In addition, the IG identified several other projects that did not appear to be valid R&D projects. I understand the Volpe Center is in the process of responding to the IG's draft report, but I would be interested in your response to the Inspector General's preliminary findings that the Volpe Center was nothing more than a contract or procurement manager on some projects for the modal administrations, and that some of your work is not research related.

Ms. GUTIÉRREZ. Let me start with that, and maybe Dick would like to respond to that.

Overall, I would say that we don't have disagreement with what the findings of what the IG report are. I think we do need to review the work acceptance criteria that we have in place. That initiative has already started. I have had several briefings, and I have put in place a series of procedures and reviews and controls, clear criteria as to the kind of work and projects that the Volpe Center will do.

This is all closely linked to reviewing the mission and realigning that mission to the DOT priorities.

So we have already initiated some efforts to bring the review process and the authority process into a tightening up of the way the Volpe accepted work. I, for example, have taken back, as the Acting Administrator, authority on all those contracts until we are certain that we put in place the necessary controls.

We believe that the findings of the IG were accurate in some of the contracts that were let out, but they really do not represent the majority of the kind of work that the Volpe Center does. In my opinion, it is on target. It does focus primarily on transportation-related technology work. Their findings did identify, I believe, 10 projects that they found questionable. So we will be looking at the work acceptance process much more closely than before.

I don't know, Dick, if you had something to add to this.

Mr. JOHN. We have, indeed, been having discussions with the IG. And one of the major issues that came up, which was referred to a moment ago, is the mission of the Center.

In our initial discussions with the IG, it saw the Center as basically a research center. As the Center has evolved over the past 25 years, we are increasingly getting involved in research development, but most important is that we are involved in technology applications and technology deployment to help our clients, to help the modes, and to help other agencies get new technology into the field.

I think that the IG in the final report that they issue will recast some assumptions about our mission.

And to the other point, with regard to whether we are a "pass-through," we try to avoid such projects at all costs. As the Director of the Center, what I see us doing in many cases is helping our clients, helping different agencies bridge to the private sector and help them to be a smart buyer, which we did in some of the instances that were mentioned by the IG. And, indeed, I think we have helped our clients save a great deal of tax dollars.

## VOLPE CENTER DEFENSE CONTRACTS

Mr. COLEMAN. There was a report by the Senate Government Operations Committee as well that highlighted the Department of Defense contracts with the Volpe Center.

In that report, off-loading of contracts that the DOD themselves could have done were highlighted. It was questioned why it was necessary for DOD to have let a contract in the amount of $13.9 million to the Volpe Center to purchase railroad cars. Was that an example where you could say, perhaps, you were able to save money for DOD?

Mr. JOHN. In that particular case we were able to save money for DOD, and DOD ended up doing the contracting. It was about $150,000 worth of Volpe labor in that program, and we essentially wrote the procurement specifications and were able to save the military funding there.

Mr. COLEMAN. The DOD also off-loaded $3.35 million from the army missile command to the Volpe Center for computer modernization.

Mr. JOHN. There, again, we think that we added value, and I would like to put more about that in the record.

[The information follows:]

The funds from the Army Missile Command (MICOM) were for upgrading its logistics information system. The system is used by MICOM to manage transport, storage, supply, and field support of a wide variety of equipment and supplies used by the Command. Volpe developed the information system architectural concept inhouse and selected the system configuration and state-of-the-art commercial hardware and software components. Volpe defined necessary software applications development tasks, conducted a competitive procurement for applications software development, monitored and evaluated the development, and purchased an initial quantity of equipment to permit startup and allow evaluation of the system. The system design was based on a "rapid prototype" that was assembled and operated by Volpe on an emergency basis for tracking and managing removal of critical weapons from Germany following dissolution of the Soviet Union.

Following initial delivery and pilot operation, the Center returned a considerable amount ($1.691 million) for hardware purchases that were determined by Center management not to require further supervision by the Center's technical team.

## VOLPE CENTER CONTRACTORS

Mr. COLEMAN. Whether or not those acquisitions could have been easily contracted by DOD itself would be better answered by DOD, but having had experience with that agency I cannot believe that it would not have been able to accomplish that. In terms of saving money, I think that it is appropriate to address the issue.

Currently, Volpe has about 600 full-time equivalent employees and nearly 1,400 full-time equivalent contract staff. Why is it necessary to have such a large number of contractors?

Mr. JOHN. That has been the direction that we have been going for the past 10 years. Essentially, the number of FTE or the number of civil servants at the Center has been held constant, and the demand, the places where we can apply our services—usefully apply our services, that demand for our services has been going up. And in order to flexibly respond to these needs essentially what we have done is instituted contractual mechanisms so we can reach a great variety of contractors on the outside.

To go back a moment in terms of the off-loading question, when funding is transferred to us from any agency, including DOD, we don't ever permit the agency which is providing us the funding to tell us which contractor to go to. We always have a competition.

And in the Levin report one of the things that was mentioned was that in some cases an agency was asking centers such as ours to essentially direct procurements to certain contractors. We have never done that. And if the question comes up or the issue comes up, we then turn away the work.

But I think the direction that we have been going is to more guide and steer work and essentially serve as a bridge from the government and our government clients to the contracting community. That has been the direction we are going. As Ana has indicated we are going to now rethink whether that is still the appropriate direction to go in.

### VOLPE CENTER—PERCENTAGE OF DOT WORK CONTRACTED

Mr. COLEMAN. What criteria will you use in determining whether to contract out a project or undertake a project with in-house resources? That is a very basic question. We would like to know what those criteria are. What proportion of DOT work accepted by Volpe is contracted out?

Mr. JOHN. Approximately 75 to 80 percent is contracted out. But, we have approximately 500 projects at the Volpe Center.

Mr. COLEMAN. Does that include DOT and non-DOT?

Mr. JOHN. Yes, sir. There are about 500 projects.

Mr. COLEMAN. What portion of that would be DOT?

Mr. JOHN. DOT is about two-thirds of the projects.

Essentially, there are 500 projects at the Center, and most of the contracting occurs in some of the major programs, the major dollar programs. Where indeed we may be putting in a management information system where we need lots of software engineers we will contract for that particular function rather than having that work done by civil servants.

Mr. COLEMAN. What you are saying is that of the DOT, there are 333 projects.

Mr. JOHN. Yes, two-thirds of the work.

Mr. COLEMAN. About 75 percent of that number as well as the total then—

Mr. JOHN. Probably about that order, yes.

Mr. COLEMAN [continuing]. Is the amount that is contracted out?

Mr. JOHN. Yes. There is probably a higher leverage with regard to DOD and non-DOD than there is with DOT contracts. The projects are not contracted out, but some of the work on the projects is contracted out.

Mr. COLEMAN. Some of the work. Right.

Ms. GUTIÉRREZ. I think that needed to have a clarification. Contracted or managed and monitored and defined in many cases in-house.

Mr. JOHN. We generally do the front-end planning and prepare the work statements and monitor the work. And, therefore, we work with people who come to us and help them think through what is the project they are undertaking. And in that sense, as I mentioned before, I do think we are helping them to be smarter buyers.

### VOLPE CENTER UNOBLIGATED BALANCES

Mr. COLEMAN. At the end of fiscal year 1993, the Volpe Center had an unobligated balance of $184 million. Unobligated balances of $180 million and $174 million are projected for the end of fiscal years 1994 and 1995, respectively. What are the reasons for those large unobligated balances?

Mr. JOHN. Those balances represent work in progress of about 10 months. Basically, this was one point where we disagreed with the IG.

In terms of that backlog, it is distributed over a wide number of projects. In other words, when we receive a project there is a certain amount of funding assigned or allocated to that project. Once the funding comes into the Center, we cannot transfer the funding from that project. So when you are talking about a backlog, there are different backlogs for each of these 500 projects that we have in the Center. The integrated value of that is, as you indicated, about $180 million.

Ms. GUTIÉRREZ. I think if I could add—what we have represented here simply is that projects don't come neatly packaged, year-to-year efforts, and it is important to be able to have some flow from one year to another. It might be a three-year project.

And coming from the private industry contracting world, that is usually the way that you have to make sure that you have got adequate resources planned over a multi-year period. This allows us to have that link from one year to another so that people do continue working on the project and there will be funding ensured for that.

Mr. COLEMAN. We understand that a significant share of new obligational authority received by Volpe each year is received in the last half of the fiscal year. Is that right?

Mr. JOHN. Actually, looking over the last three or four years, in the last quarter, we received about 30 to 35 percent of the funding It turns out, looking historically at the pattern, funding comes in generally in the first quarter and generally towards the last quarter.

In this particular year, to follow up on Ana's point, funding from the agencies within DOT other than the FAA is just now coming to us.

### VOLPE CENTER OBLIGATIONS

Mr. COLEMAN. Are the modal administrators and DOD banking expiring funds at the Volpe Center; in effect, converting single-year appropriations that might otherwise lapse into multi-year funds?

Mr. JOHN. In response to the IG and that question, we looked to see whether the funding that we received last year—whether we had projects under way and whether we were allocating that funding, and indeed we were. So all the funding that came in last year, 99 percent of it involves project spending now under way. As Ana has indicated, some of these projects last more than a year.

Mr. COLEMAN. It would be good for you to give us a breakdown of that.

The Chairman of this Subcommittee has instituted, a policy for all the agencies that come under the purview of this Subcommittee. Our concern is whether dollars that we know are really necessary in agencies that may not be expended. We believe that funds that will actually be expended in the fiscal year should be appropriated.

I think that is a majority view of this subcommittee. Some of us will fight over exact amounts, but I think that is legitimate.

I would like an analysis of that by your office for the record so that we have it when we consider the budget.

Ms. GUTIÉRREZ. We will be happy to provide that for you.

[The information follows:]

[Dollars in millions]

| Fiscal year | Unobligated authority into FY | Authority on unstarted work one year later | Percent of unobligated (percent) |
|---|---|---|---|
| 1991 | $135.1 | <$0.2 | nil |
| 1992 | 179.0 | <0.2 | nil |
| 1993 | 173.0 | 0.2 | 0.14 |
| 1994 | 183.8 | [1] 0.8 | 0.46 |

[1] As of 3/31/94.

### PIPELINE SAFETY—EDISON EXPLOSION

Mr. COLEMAN. All right. Let me move on to another area; the Edison, New Jersey, gas pipeline explosion.

According to initial reports, the likely cause of last month's gas pipeline explosion may be a small gouge in the pipe caused by construction activity nearby. Would you provide an update on your investigation of this incident and the actions that you have taken so far?

Ms. GUTIÉRREZ. I would be happy to.

This, again, was one of my first activities with RSPA. I was able to go up to the site a few days after the rupture, and it really brought to mind exactly what the potential danger, the threat to safety, that this kind of accident can bring to bear.

We have, I think, taken very aggressive action as a result of the accident. From the first day, we had issued a hazardous facility order that specified in detail what kind of measures the Texas Eastern pipeline owners had to take before anything could be brought back on line. We have been working closely with local authorities as well as with State representatives.. The mayor has been very actively involved with the whole process.

Our primary focus was to look at what could be done to test the pipeline immediately and to ensure that there was no potential of another rupture nearby. So we required testing and uncovering of the pipeline over a large extent to make sure that gouging or other external damage could be identified in the site.

After several of these initiatives—and George Tenley can probably go into them in more detail if you would like—the pipeline will be back in service on Wednesday. They have completed the tests that we had required as well as those requirements by the mayor to provide him some additional time to be able to make the public announcements and to ensure that the public safety was addressed.

Now, that is not it. We are going to follow up with an extensive comprehensive review of all the pipelines, the interstate pipelines in the New Jersey area. We are bringing in staff from our other regional offices. We have set up a temporary office there to carry out their in-depth review, and we are going to look at particularly what are the causes of this kind of accident that relate to urban planning. What is in place that might have avoided this damage from its terrible point in time?

We are also sponsoring a study by the New Jersey Institute of Technology of risks and identifying appropriate risk reduction approaches. The study will look at areas that have become heavily populated. The pipeline might have been laid when there was nobody living around in the area and all of a sudden you now have apartments and asphalt plants right around the pipelines—and how can we then mitigate the risk that has now developed.

Those are, I would say, are our highlights around the New Jersey effort.

We are also planning to have a pipeline safety summit that—hopefully, end of June or early July—where we could bring together the experts on all the issues that relate to pipeline safety. Not only the technical experts that can talk to us about the construction of a pipeline, the maintenance of a pipeline, the pigging, the testing of it, but also the State and local officials that have very much to do with the urban encroachment safety issues that we will have to address.

I would like to turn it over to George, if you have any specific questions about the pipeline or in addition to the comments that I have made.

## PIPELINE SAFETY RISK-BASED MODEL

Mr. COLEMAN. In 1990, the Office of Pipeline Safety developed a risk-based model to target pipeline inspections to the highest risk pipeline operators, such as those with a history of violations, and those operating in high population and in environmentally sensitive areas. Since you will be shifting additional inspectors to New Jersey, won't this action undermine the integrity of your pipeline inspection program?

Mr. TENLEY. I don't think so, Mr. Chairman. This accident is an opportunity for a laboratory look at all of the issues that we are concerned about. The Acting Administrator mentioned the one about pipeline encroachment. These pipelines are in populated areas in only 4 percent of their locations in the country, but in New Jersey 39 percent of the Texas Eastern pipelines are in the populated areas.

As the Committee knows, following the Colonial accident last year, we had begun to put more emphasis on our liquid program, and I had been telling the gas industry that they should be aware that some day their Exxon Valdez may come. And I think this is a wake-up call that they need to be doing more on their pipelines. It gives us an opportunity to work with them through this investigation and inspection to identify the kinds of risks that exist in these and areas to take actions. There is no question that we are putting a lot of resources into it, but I expect the payoff to be great as well.

### PIPELINE SAFETY—PANHANDLE EASTERN INSPECTION

Mr. COLEMAN. The pipeline involved in that explosion was operated by Panhandle Eastern Corporation. I noted that you were quoted in the New York Times as saying that the Panhandle Eastern Corporation is one of the better gas transmission companies in the United States; and that they had major problems in 1984, 1985 and 1986, but those problems led to a turnaround of the company. Given that company's previous record of problems, did the Office of Pipeline Safety target the company's operational and maintenance practices for review under your pipeline inspection priority program?

Mr. TENLEY. Much had been done with this operator in the period 1985, 1986, both by ourselves and in conjunction with the Kentucky pipeline officials. So heading into the late 1980s and early 1990 we had a good indication about how this pipeline had been turned around. And we had inspected it in 1987 coming out of those investigations and again in 1992.

And I have been asked the question, where did this pipeline show up on your risk ranking? This pipeline was not ranked as one of the top third of risks in the eastern region, and we probably would not have seen this pipeline again until 1996 at the earliest because of the record it established after 1986.

Mr. COLEMAN. That pipeline was last inspected using an internal inspection seven years ago as I understand it.

Mr. TENLEY. That is correct.

Mr. COLEMAN. By the Panhandle Eastern Corporation.

Mr. TENLEY. Correct.

Mr. COLEMAN. Have you analyzed the results of that inspection?

Mr. TENLEY. We are doing that right now. We will be doing a more in-depth evaluation. Our preliminary indication is that this damage was not indicated on that pig, but again——

Mr. COLEMAN. When you say "that pig", would you describe what you mean?

Mr. TENLEY. The pig was a corrosion pig that can measure loss of wall in the pipe. And while it is directed at corrosion-based loss of wall, it can also find other anomalies. And I did see the gouge that arguably led to this failure, and one of the things that we are going to want to find out is should that gouge have been picked up by that pig. But it is going to take a much more in-depth analysis than we have been able to do to date.

Mr. COLEMAN. Did that inspection identify any abnormalities in the pipeline that were not corrected by the company?

Mr. TENLEY. As of our initial reading, no, it did not.

### PIPELINE SAFETY—PIGGING RULE

Mr. COLEMAN. The 1992 Pipeline Safety Act requires the agency to issue, by October of 1995, a final regulation that would require the periodic inspection of certain gas pipelines in high density population areas using smart pigs, or equivalent inspection methods. If this regulation had been in place or a regulation that anticipated requiring a more recent inspection by a pigging device, could the New Jersey explosion have been avoided?

Mr. TENLEY. Again, we don't know that yet. For the purposes of building a regulation under the requirements of that law, this will be relevant information, but we just don't know yet.

Mr. COLEMAN. Do you think that will delay the rulemaking?

Mr. TENLEY. No, I do not.

Mr. COLEMAN. What is the status of it?

Mr. TENLEY. We had a requirement in the 1988 reauthorization act, which is a precursor to the pigging requirements in the 1992 reauthorization act, that requires all new and replaced pipelines to be made "piggable" or capable of accepting an internal inspection device. That final rule is being published in the Federal Register today, and now we can get on with the issue of requiring periodic inspections in the two locations that you mentioned.

### PIPELINE SAFETY—INSPECTIONS

Mr. COLEMAN. Last year, the Office of Pipeline Safety allocated a significant amount of resources to investigate the Colonial spill in Virginia. As a result, previously scheduled inspections in the Eastern region were not conducted. This year, you are shifting inspector personnel to New Jersey and, I suspect, as a result, other high-risk pipelines may not be inspected. Would that be a fair statement?

Mr. TENLEY. We are committed to making all of our high-risk inspections, and we will bring in inspectors from other areas if necessary to make sure that we see the top third of pipelines in the eastern region.

Mr. COLEMAN. While no one disputes the seriousness of that accident in New Jersey, one might argue that the pipeline safety program is lurching from one crisis to another. Those inspectors that you may pull off from the west or the south or somewhere else then may all have to return to another accident. Is it a fair statement to say that it appears that you are lurching from one crisis to another?

If that statement is a valid one, then should we make a concerted effort to request and indeed demand additional personnel to do the job, and to address the backlog of pipeline regulatory mandates? Do we have a backlog of mandates?

Mr. TENLEY. Yes, sir. We do.

Mr. COLEMAN. Should we make additional demands on the American people or let them put into their analysis of delineating priorities in this country that we should conduct safety inspections and anticipate emerging safety issues and needs?

Mr. TENLEY. I would say a couple of things.

First of all, the program that I am the head of is in transition, both with respect to resources but also with respect to demands. This program was not known or had any impact up until 1988. And, since 1988, we have been brought kicking and screaming, if you will, into the latter half of the 20th century. And I think right now, with the accident in Fairfax County last year and this accident, we need to understand, as the Acting Administrator said, risk management. We have to sell the concept of risk management, we have not done that previously for a number of reasons.

Our data has been inadequate. We did not have the right skill mix of people to do that. We are beginning to build that skill mix. But—this may seem ludicrous, but I think we have had too large a focus up front on inspection and not enough focus on how we are going to run the program correctly and how we are going to take on these mandates. How are we going to avoid mandates?

One of the issues is that the NTSB and the Congress have felt—and I am not saying incorrectly so—that they needed to put on our plate what we needed to have on our plate. We couldn't do it because we didn't have the wherewithal to do it.

We are trying to transition away from the past, with mandates that were not our own, to the future, which is a pipeline program based upon our own assessments of risk.

So I can't tell you this is the right number of people. I have always answered a question like this their way: Well, if you gave me another 500 inspectors tomorrow to inspect pipelines, that would not necessarily mean my program is running any better. I would have to have a different mix of skills than just inspectors.

I don't want to get ahead of the President's budget. We are asking for three more people. But we have to do a better job of getting data and using that data well. And I think that is just as important. So I think next year or the year after I would be in a position, or the Acting Administrator would be in a position, to say to you that, based on our assessment of what has happened in the last year or two years, this is what we think the appropriate program level ought to be.

Mr. COLEMAN. Earlier, you said that if RSPA inspectors were there when the pipeline is put in the ground, there are huge advantages.

Mr. TENLEY. That is correct.

Mr. COLEMAN. The additional three people won't help you do that.

Mr. TENLEY. The additional three people, in conjunction with contracted services that we have requested, will begin to tell us just what can be gained by being in the ditch and if contracting is the right way to go or whether we need a few more people to go with that.

We had an accident in the central region and, based upon what we are able to learn from that accident, we were able to go into Long Island, New York, and find the same contractor doing the same problem, and we were able to have it corrected. So we had a payoff from being in the ditch.

## PIPELINE SAFETY PROGRAM TRANSITION

Mr. COLEMAN. You said that you were in transition. Would you explain that to me? You did in a sense, but I am interested in the timeframes and more specifics.

Mr. TENLEY. You cited the accidents of this operator in Edison, New Jersey, and Kentucky back in 1984 and 1985. At that time, our program was very small. We had few, if any, legislative mandates. We were working on a host of some long-standing NTSB recommendations, but we were basically a sleepy little program, a very small budget. We were not meeting the grant mandates of 50 percent funding for the States.

We had the accidents in Kentucky. Then we had an accident in Minnesota in July of 1986 which killed a mother and her daughter. And based upon some very strong, aggressive, committed efforts of Members of Congress from Minnesota, the pipeline safety program was brought to national prominence. That prominence was based upon a series of legislative mandates.

There were 10 mandates in the 1988 reauthorization, but there were no concomitant increases in resources for my program in order to meet those mandates. So we were found wanting because the mandates were rising, and we were not producing. And today we have still not produced some of the rulemakings, some of the less significant ones, coming out of the 1988 act.

We then come to 1990. After the Exxon Valdez accident in 1989 the Oil Pollution Act is passed. And Chairman Tauzin sponsored legislation to improve the inspection of pipelines on offshore areas. And we had the Pipeline Safety Reauthorization Act of 1992.

Over that period of time, to take on those mandates, the percentage increases we received were 95 percent in the inspection side and very little in the program side. So I had no environmental engineers. I had no economists.

So it has been difficult to build the skill base in order to get us to where we want to be, which is ahead of the curve. And I think we have a model that we are working on, a risk assessment model, which will say, for example, why corrosion should be at the top and why abandoned offshore pipelines should be at the bottom. But until we have that rational basis, we are subject to the criticism that we don't know what is out there and we don't know what to do with it and we don't have the wherewithal to do it.

Mr. COLEMAN. Can we solve that?

Mr. TENLEY. We can solve it in a couple of ways. And the first way, I think, is in next year's reauthorization. If we could get some breathing room from the Congress and be free of more mandates—and we are working very well with Hill staff. We are fortunate that the committee staffs that we work with are very, very supportive of our efforts. They work very closely with us. If we can get that breathing space in the next reauthorization and have our risk model come into being at the end of this year, I think we have a real opportunity.

I know that you mentioned the point about the concerns of the local citizenry. I think we have a huge education job to do in the Department of Transportation on pipelines, both within the Department and outside the Department among States.

The Acting Administrator mentioned the problem of encroachment on pipelines. The citizens in New Jersey are upset about this, and they are concerned about the pipeline going back into service on Wednesday.

When this pipeline was laid, these apartments were not there. There was nothing in this area. These apartments were not within 300 yards of a pipeline. They are there today. They are not there by virtue of anything my program did or didn't do or the Department of Transportation did or didn't do. Local land use planners allowed that development.

So it gets into the issue of how much risk is the American public willing to accept. But in accepting that risk, they have to know what is there. We have to do a better job of telling them about pipelines.

Are they safe? Yes, they are. What are the problems? How do you solve the problems? What are we doing to fix the problems? And it is a message that I am trying to take to the industry as well as the States.

### SANITARY FOOD TRANSPORTATION ACT

Mr. COLEMAN. I think you are right. We have to at least make sure that they are advised of the risks.

It is like getting a medical treatment. As long as you know that there are risks involved, I think those are legitimate decisions for individuals to make, just like the location of the apartments in New Jersey.

I agree. I think that is the direction to go. I appreciate your answers.

Let me move to the Sanitary Food Transportation Act of 1990. It calls for the Secretary of Transportation to issue regulations that promote the safe transportation of food products.

In May, 1993, RSPA proposed new regulations to implement the Sanitary Food Transportation Act and requested $150,000 to implement SFTA in fiscal year 1994. However, your fiscal year 1995 budget proposes no funding to implement the regulations. Could you give us an explanation for what appears to be a dramatic position shift?

Ms. GUTIÉRREZ. The way that we have viewed our responsibilities in the Sanitary Food and Transportation Act is that we basically have a part of the problem rather than the total problem before us. And looking at it as just one section of the total harvest to table, I think, put a requirement on our transportation which is not within really our core mission. There are other agencies that are looking at that total harvest-to-table approach for ensuring that food that reaches our table is not contaminated.

As we looked at the requirements of the act and we went out with a notice for rulemaking and we have been in touch with industry—we have also been heavily involved with the other agencies, FDA, Agriculture, to understand better, because this really has been outside our normal purview of dealing with hazardous materials—we have come to the conclusion that the authority does lie and perhaps really belongs with the other agencies to carry out the full mandate.

When we reviewed all of the programs and were looking to make some tough choices, this is the one that we felt if we could eliminate one of our programs this would be the one that we would put forward.

I looked at the records from previous committees last night, and I went back two or three years, and I think that SFTA has been part of the discussion with this Committee for several years with this concern of this the best place to deliver this kind of oversight for food contamination.

Since we have raised the issue there have been some concerns raised in, indeed, whether it is now the point in time when we should go forth with repeal or do we need to look at maybe there is some additional legislation that is necessary to ensure that the authorities are there in the other agencies. We have been working very closely with the other agencies and——

Mr. COLEMAN. Specifically, the Department of Agriculture?

Ms. GUTIÉRREZ. The Department of Agriculture and FDA.

Mr. COLEMAN. The Chairman of the Agriculture Subcommittee just came in. I thought it might be good to point out. What has been the view of the Department of Agriculture toward this particular regulation—

Ms. GUTIÉRREZ. Specifically——

Mr. COLEMAN. Does the Agriculture Department believe that backhauling is really not a problem? Do they happen to agree? Tell me about those discussions with the Department of Agriculture.

Ms. GUTIÉRREZ. The basis for coming up with the legislation for backhauling—as we have looked into the data we have not found that it is a significant problem.

Mr. COLEMAN. Significant problem.

Ms. GUTIÉRREZ. Our discussions lately have been with indeed how we ensure that the transportation piece of that harvest-to-table is inspected, is taken care of. And our discussions with Agriculture have been how can you at your points of involvement better check at the point at which food is either loaded into the truck or unloaded off the truck. Is that a better point at which to inspect? And there still is some dialogue that has to take place.

I would like maybe to ask the Associate Administrator for Hazardous Materials, who has been involved with this for a longer time than I have been, to add some clarification of the role of Agriculture.

Mr. ROBERTS. First, Mr. Coleman, I would answer that in last year's—hearing record at page 943—Chairman Carr indicated the subcommittee is not a fan of SFTA, and you might characterize that we have not been a fan of the Sanitary Food Act either.

Reading the legislation literally, we recognized right from the beginning that it would be a very onerous regulatory regime were we to implement it to its fullest extent. Our attempt has been to implement a reasonable and appropriate set of regulatory standards that would accomplish the basic intent of the legislation.

Last year, we issued the rulemaking. We held two public hearings, and we have received numerous comments. I have been in the hazardous materials business 30 years, and I have never seen anything like this in terms of a regulatory sense. We are dealing with a whole new potential regulated population.

In the HAZMAT area, we estimated that we have 34 different trade organizations that we were dealing with. In the food industry there are over 400. And a vast amount of our staff resources have gone to dialoguing with many of these different trade organizations, and we have received numerous comments, all of which start out commending the Department for its effort, and then several pages of comments on the howevers, citing the problems with each of the rule making proposals that we have published to date.

The farming community, the co-ops, the agribusinesses, all types of people have participated in this proceeding and have come to our hearings with constructive points of view, how we should address the SFTA issue.

But, right now, we are looking at the possibility of adopting a final rule and putting it into place. We have some really serious problems as to whether it is necessary in the interest of the food safety system.

Looking at where the interface is—the key interface is at the loading point, the interface is the producing plant or the warehouse or the facility where the material is loaded into the vehicles, and there is a large cadre of inspection personnel at many of those facilities.

Mr. COLEMAN. Is that mainly FDA?

Mr. ROBERTS. Mainly FDA. There are several thousand inspection personnel, and it has been stated that they do look at transportation equipment as an adjunct to their basic responsibilities, but we haven't been able to identify any serious problems.

In the food industry, one of the local very large firms that you might call a "giant" firm, will not just accept packages that come in that are stained. So the industry is very self-regulating in the sense of that type of operation.

So the question is, who are we addressing ourselves to? There is an old adage that a regulation is a solution to the problem—we have not been able to identify a specific problem that we should address, and this has been part of our problem.

Mr. COLEMAN. Are you still having discussions with the FDA and HHS?

Mr. ROBERTS. The law exists. The law is on the books. We have an open rulemaking proceeding. We are dialoguing with the other agencies and have been as recently as yesterday. We are attempting to come up with an appropriate solution to this matter.

Ms. GUTIÉRREZ. And our intent is to do that very quickly.

Mr. COLEMAN. Your budget request includes a reduction of 5 FTEs based on an assumption that SPTA would be repealed. If the law is not repealed, are you going to seek personnel from other agencies? If so, which ones? Which agencies will carry out the requirements of the act if it is not repealed?

Ms. GUTIÉRREZ. That is part of the discussions that we will be having with the interagency group. We need to clarify that. There are some proposals being considered where there would be no funding requirement for us to carry out the requirements of the act until such time as we can either propose some improved legislation or we come up to what perhaps is a better solution.

Mr. COLEMAN. There is one other thing that ought to happen, and probably you are as aware of it as anybody.

I can remember being an assistant prosecutor many, many years ago. The state legislature passed a criminal statute that made it next to impossible to administer it if you followed the letter of the law. The persons that were actually in the best place to let the legislature know when they made a mistake were those of us at that level, usually the last prosecuting office in the courthouse, because we were the ones that had to make sense of it and make it work.

I would say that, even without repeal, you should probably advise. The process calls for us to ask you how a statute needs to be modified so you can effectively and economically administer the thrust of the legislation.

Now there will always be those who don't like the legislation. If it passed and became law, we are going to enforce it. That is the way it is.

But, you need to advise us about how to make it workable, provided that the thrust of that legislation is still felt important enough by the American people.

So all I am saying is that I you need to advise us, even if the law is not repealed, about how it needs to be modified. That should be, in my view, a part of your discussions, too. If, in fact, we believe that a strong enough case can be made that the industries themselves are self-policing sufficiently and adequately, then perhaps we should repeal the law. I have no problem with those kinds of reviews. As you pointed out, the Committee has more or less taken that view anyway.

On the other hand, short of repeal, let's talk about how we can make the law workable. I think that is advice that you are not giving us. It would be wrong for anyone participating in this process to say we don't want that advice. Quite the contrary. We not only want it, we need it. I would appreciate your doing that. Feel free to communicate with us and the staff.

I have no other questions other than the ones that I will submit for the record.

With respect to university research centers, one issue I have been following is the inclusion of minority institutions within research initiatives. I have been particularly interested in the activities of historically Black colleges and universities as well as Hispanic-serving institutions. Please describe whether minority institutions have participated in current RSPA programs.

[The information follows:]

In the three years since the university research program was transferred to RSPA from the Office of the Assistant Secretary for Policy, RSPA has had no opportunity to change the number or identity of grantees except through the award of grants to those universities identified by name in the authorizing legislation.

Ten regional University Transportation Centers were selected in 1988 after a nationwide competition. To be eligible for an award, a prospective grantee had to demonstrate that it met the minimum criteria set forth in the language of the statute. In nine of the ten regions, the grant for establishment of a University Transportation Center was awarded to a single university on behalf of a consortium. (The sole exception was Region 9, where the award went to the Regents of the University of California on behalf of several members institutions.) Several of these consortia include a Historically Black College or University and/or a Hispanic institution.

The Intermodal Surface Transportation Efficiency Act of 1991 created a new program of five University Research Institutes involving nine named universities. Three of these universities are minority institutions.

Mr. COLEMAN. What are future plans in this regard?

[The information follows:]

The ten regional university transportation centers will undergo a recompetition in 1994. Any minority institution that satisfies the statutory eligibility requirements may apply. We expect that some applicants will choose to form consortia that include HBCUs and/or Hispanic institutions, as has been done in the past.

Mr. COLEMAN. Please describe outreach efforts to include minority institutions.

[The information follows:]

Several of the regional university transportation centers are made up of a consortium of schools that includes minority institutions. All centers operate some form of outreach activities to minority faculty and students from within their respective regions. In addition, the Intermodal Surface Transportation Efficiency Act of 1991 created a new university transportation center located at a historically Black university. This center is specifically charged by statute to accelerate the involvement and participation of minority individuals and women in transportation-related professions.

Mr. COLEMAN. Please detail which historically Black colleges and universities and Hispanic-serving institutions are currently involved in RSPA programs.

[The information follows:]

At the present time, the nineteen university grants under RSPA's management include participation by five Historically Black Colleges and Universities and three Hispanic-serving institutions. Participating school are listed below, along with their affiliation under either the University Transportation Centers (UTC) or University Research Institutes (URI) Program.

### HISTORICALLY BLACK COLLEGES AND UNIVERSITIES

Central State University (UTC consortium member).
Florida A&M University (URI consortium member).
Morgan State University (UTC grantee).
North Carolina A&T State University (URI grantee).
North Carolina A&T State University (UTC consortium member).
Texas Southern University (UTC consortium member).

### HISPANIC-SERVING INSTITUTIONS

Florida International University (URI consortium member).
University of Puerto Rico (UTC consortium member).
University of the Virgin Islands (UTC consortium member).

## RSPA'S BUDGET INCREASE

Mr. COLEMAN. RSPA's fiscal year 1995 request of $60 million represents an increase of 9.4 percent over the fiscal year 1994 enacted budget. RSPA would receive the second largest percentage increase within the Department, after the Federal Railroad Administration. In absolute terms, RSPA'S fiscal year 1995 request is an increase of $5.2 million over the fiscal year 1994 enacted budget.

Ms. Stoll, when several of the other modal administrations would receive fewer funds in fiscal year 1995 under the Department's budget request than in the current fiscal year, why did the administration determine that RSPA should receive a larger increase this year?

[The information follows:]

The Department asked each operating administration to review its programs and identify low priority areas that could be cut back or eliminated and high priority areas that must be protected or enhanced. Such analysis does not, by definition, produce uniform results. It is also misleading to focus on percentage growth across all modes, since small dollar increases in small organizations like RSPA become large percentage increases. In RSPA, the increase is driven by additional funds requested to strengthen the Pipeline Safety account. In this account, user fees are available to offset any increases in discretionary spending. That is an advantage RSPA has over other accounts.

## MAJOR BUDGET INCREASES

Mr. COLEMAN. Within the RSPA budget, the research and technology program and the office of emergency transportation are singled out for substantial funding increases of over 50 percent. Why does RSPA accord these activities as particularly high priorities?

[The information follows:]

Over the past decade, the United States has suffered an ever increasing number of natural disasters. This trend culminated in the three costliest disasters in American history in a mere two years—Hurricane Andrew, the Midwest floods, and the Northridge earthquake—affecting the Nation from coast to coast. In addition, we engaged in the most intense foreign conflict in a quarter century, Operation Desert Storm. Transportation is absolutely fundamental to the support of our citizens affected by these emergencies, whether they are the tragic victims of disaster or brave soldiers under enemy fire. Recognizing transportation's critical role, Secretary Peña has committed both himself and the Department to proactively assist our "customers," an initiative he terms "putting people first in disasters." Within DOT, principal responsibility for crisis management rests with RSPA's Office of Emergency Transportation. The office plans for the Department's response to major emergencies and, when an emergency strikes, manages that intensive response. Yet, elements of the program are obsolete, reflecting years of neglect and low priority. The 1995 budget proposes to begin a process to correct these deficiencies and enable swift and effective response. President Clinton and Secretary Peña have demonstrated their commitment to the critical role the Federal Government must play in disasters. Effective transportation services is absolutely essential to meeting their commitments. This high priority, even in a period of declining Federal budgets, insures that the Department can perform its essential relief and recovery mission. To do less would risk failure in the face of crisis, jeopardizing both the victims of national disaster and our Nation's global security.

## RSPA ASSESSMENT OF PROGRAM INVESTMENTS

Mr. COLEMAN. Given RSPA's diverse and multi-modal responsibilities, how does RSPA determine the relative value of investments in such disparate activities as emergency transportation coordination, research and technology, hazardous materials safety and pipeline safety? How do you assess their relative merits and risks in what would appear to be an apples and oranges type of comparison?

[The information follows:]

RSPA determines the relative value of investments by following the Secretary's strategic plan in terms of unifying our workforce. The strategic plan outlines seven goals in which RSPA has a lead part or simply interacts with other modal administrations. For example, Goal 6.3, ensuring that disaster relief efforts restore mobility and commerce to users in an effective and efficient manner. This particular goal, RSPA has taken the lead within the department by coordinating all transportation response activities by working with all modal components during a natural disaster.

Another example, Goal 3.2, focuses on implementing the Global Positioning System (GPS) as the world's standard in the air, on land, and over water. RSPA's Office of Hazardous materials Safety in ensuring the safety of the transportation of hazardous materials, has taken the lead in tracking hazardous materials shipments via GPS. RSPA has found that this departmental document is useful in focusing on what we need to do and how we will be about doing it.

## PERFORMANCE-BASED BUDGETING

Mr. COLEMAN. The National Performance Review recommends that federal agencies move toward the development of mission-driven, results-oriented budgeting where program goals are clearly defined, performance measures are developed and program outcomes assessed against these measures. I understand that the Secretary has volunteered the entire Department of Transportation to be part of a pilot effort to develop performance based budgets.

Has RSPA begun a process of developing such measures?

[The information follows:]

Yes, RSPA has begun the process of developing such measures. Over the past 18 months, RSPA has contributed to The National Performance Review (NPR), The Government Performance and Results Act (GPRA) and Secretary Peña's DOT Strategic Plan. All three of these initiatives emphasize mission-driven, result oriented budgeting where program goals are clearly defined and program outcomes are assessed using performance measures.

Specifically, on March 1, 1994, as part of DOT's GPRA implementation plan, RSPA provided the Assistant Secretary for Budget and Programs a list of our major programs along with our preliminary assessment of the extent to which we have data on program performance, and the performance goals we have set to date. Also under GPRA implementation, RSPA has named individual coordinators in each major organizational unit who attended Departmental GPRA training on April 22 and are responsible for coordinating further GPRA implementation. In the next few months we expect to refine our performance goals and performance measures as well as begin to identify data gaps that must be filled prior to full GPRA implementation.

Finally, out of the entire Department, Secretary Peña nominated four projects for participation in the initial pilot phase of performance plans and reports under GPRA. All four were selected. They are Coast Guard's Marine Safety, Security, and Environmental Protection program, Federal Aviation Administration's Airways Facilities organization, Federal Highway's Federal Lands program, and all of the National Highway Traffic Safety Administration.

Mr. COLEMAN. What difficulties do you foresee in developing performance-based program measures?

[The information follows:]

We forsee difficulties developing performance measures from our existing data bases. We are now beginning to identify data gaps, design program goals, develop measures of program performance and their associated data sources.

## STAFF RESOURCES

Mr. COLEMAN. Does RSPA have an adequate number of people to carry out its safety and other important responsibilities?

[The information follows:]

We realize that one of our important management challenges is maximizing the use of allocated resources to carry out our mission. We believe we are doing that. RSPA contracts out for some administrative services which are not inherently governmental, but which are still important to maintenance of our programs and are necessary to meet day to day requirements. Contracting out for support and administrative positions is the most effective way to help accomplish our goals, since RSPA does not have positions or significant numbers of Federal employees to perform some of these functions within its authorized FTE base.

Mr. COLEMAN. RSPA is requesting 895 full-time equivalents (FTEs) for fiscal year 1995, which includes 37 FTEs for the transfer of the Transportation Safety Institute [TSI) to RSPA from the FAA. Excluding the FTEs transferred for TSI, RSPA's 1995 FTE request is 858, a reduction of five FTEs below the enacted 1993 base level. This is an FTE reduction of less than 1 percent, compared to the Department's target of a 5 percent reduction. Why did the Department decide not to apply the full 5 percent FTE reduction target to RSPA?

[The information follows:]

In fiscal year 1994 the Congress provided an additional eight FTEs above the requested level for the Pipeline Safety and Hazardous Materials Safety accounts. The additional eight FTEs increased the RSPA fiscal year 1995 levels, and were not counted in reduction targets as calculated by DOT. In other words, the additional eight FTE as provided by the Congress in fiscal year 1994 were not factored into the RSPA fiscal year 1995 reduction targets.

## R&D ROLE

Mr. COLEMAN. As you know, this subcommittee has been concerned about the apparent lack of cohesiveness in the research and development activities conducted by the Department's modal administrations. This concern was echoed in the Vice President's National Performance Review which recommended that the Department "develop an integrated national transportation research and development plan" that considers specific transportation needs as well as inter-modal transportation plans.

The Secretary recently announced that he has hired a new Director of Technology Deployment to integrate research and development programs within the Department into one cohesive package. However, RSPA has specific responsibility for coordinating research and development within the Department, and it appears that some of the duties envisioned for this new position may overlap with that of the RSPA Administrator. Rather than bring the R&D efforts in DOT together, the new Director of Technology may, in fact, be causing confusion regarding the apparent overlap between RSPA and the new Director.

Will RSPA's role change with the appointment of a technology director?

[The information follows:]

The Secretary has put great emphasis on revitalizing the R&D management process in the Department. The hiring of the Director of Technology Deployment in the Office of the Secretary is just one action in a much broader "reinvention" of the R&D management and oversight process in the Department.

RSPA is looking forward to working with the new Director, and is glad the Secretary has placed such high visibility on Research and Development. We are playing an important role providing administrative and technical support to a retooled Research and Technology Coordinating Council. We also are pivotally involved in a new policy-level Research and Technology Steering Committee, and an Interagency Transportation R&D Coordinating Committee established under the National Council for Science and Technology. RSPA's involvement in the whole process is extensive and proactive.

## RESPONSE TO TRANSPORTATION RESEARCH BOARD COMMENTS

Mr. COLEMAN. The following statements were made in a 1993 evaluation of the university transportation centers program by the Transportation Research Board:

"Matching fund requirements tend to skew center research programs toward local priorities and single mode concerns (primarily those of the highway sector) instead of allowing the focus to be on issues of regional and national significance with multi-modal dimensions"; and

"In particular, the program is falling short in supporting long-term research that leads to fundamental advances in the transportation field."

Does RSPA agree with these statements? What are you doing to address these deficiencies?

[The information follows:]

As a general proposition, the Transportation Research Board (TRB) finding that "[m]atching fund requirements tend to skew center research programs" comports with RSPA's observations. Those Centers without an assured source of matching funds are limited in their research choices to projects with individual funding sponsors. Since highway departments generally invest more in R&D than do transit operators, such sponsored research tends to address highway rather than multimodal issues. Additionally, since Federal funds cannot be used to match UTC grant funding, most sources of matching funds are state or regional, as are their research interests.

From the foregoing, the TRB concluded that the UTC Program was "falling short in supporting long-term research that leads to fundamental advances in the transportation field." Again, as a general proposition, this finding comports with RSPA's observations. Those Centers that have an assured source of matching funds have consistently undertaken more research projects on long-term issues. These Centers, in turn, have generated criticism from reviewers other than TRB on the grounds that they fall short in supporting the operational research needs of the Department.

The matching fund requirement is a non-discretionary requirement of law. While it does have the negative impact described above, it also has a positive effect. Requiring Centers to obtain equal funding from a non-Federal source imposes a real-world test on the importance of the projects they propose to undertake. Until the law is changed, RSPA will continue to enforce the matching fund requirement.

RSPA shares TRB's view that the program could support a greater amount of long-term research that leads to fundamental advances. All Centers are encouraged to pursue the primary mission of academia (expanding the body of human knowledge) to the maximum extent consistent with program requirements and the Departmental policy priorities.

## UTC PROGRAM ACHIEVEMENTS

Mr. COLEMAN. Can you cite any achievements of the university transportation centers program?

[The information follows:]

The University Transportation Centers (UTC) Program has engaged research personnel and facilities in more than 500 research projects, has issued more than 600 reports and has involved more than 1500 university students and faculty in educational programs and other program activities.

The most lasting achievement of the UTC Program will have been its investment in the human infrastructure. As a direct result of the UTC Program, the future cadre of transportation professionals will be more numerous, more diverse and more attuned to intermodalism than ever before. The Centers provide direct and indirect support for more than 700 graduate students each year. Many UTC graduates have already earned appointments at major universities as teaching and research faculty.

## UTC RESEARCH RESULTS

Mr. COLEMAN. Please give some examples of how the research results of the centers are being used.

[The information follows:]

One such example involves cashing-out parking. Professor Donald Shoup of UCLA utilized UTC support to examine the effects of employer-paid parking on travel behavior. This provides drivers with a tax-free wage supplement unavailable to commuters who use public transit. From his findings he developed a proposal that employers who lease parking spaces for employees' use should be required to pay cash to those employees who stop using free parking space.

That idea has since been enacted into California state law and is being considered by several other states. In addition to reducing the number of drive-along commuters, the new law will mean an increase in ride-sharing and transit usage, with commensurate reductions in air pollution, energy consumption and traffic accidents.

## UTC COMPETITION

Mr. COLEMAN. During the current fiscal year, the original 10 university transportation centers authorized in the 1987 Surface Transportation Assistance Act will compete for continued funding for fiscal years 1996 through 1998. What criteria and what procedures will you incorporate into the grant competition to ensure that centers with a poor performance record are not successful in obtaining grant renewal?

[The information follows:]

In 1992, the Department extended each of the University Transportation Centers non-competitively for three years and announced that there would be a full and open competition for the remaining three years of program authorization. That is the process we are about to initiate.

The Program Announcement calling for proposals from interested universities is undergoing final coordination and will be ready for dissemination shortly. That document outlines in detail the steps each prospective Center must take to submit a properly completed proposal. RSPA has taken steps to ensure the broadcast possible publication of notice concerning the forthcoming issuance of this Program Announcement. In early January, we published an advertisement in the Chronicle of Higher Education copies of which were distributed at the Transportation Research Board Meeting in January. More recently we published a notice in the Commerce Business Daily. More than 150 institutions of higher education have indicated their interest in receiving a copy of the Announcement.

RSPA has taken every precaution to ensure that this competition will be both fair and open to all qualifying institutions of higher education. Working in close coordination with the program's funding sponsors, RSPA staff have designed an evaluation system that will rank the proposals according to objective criteria which neither favor nor prejudice the current Centers. Another factor that can create the appearance of bias is the length of time allowed for preparation and submission of a proposal. The first competitive program announcement allowed three months for preparation of proposals and we plan to allow the same amount of time for this announcement.

Every proposal received in response to the Program Announcement will undergo a two-tier review by an intra-Departmental technical evaluation team composed of representatives from RSPA, the two funding sponsors and other interested Departmental entities. The first tier review will address the absolute qualification criteria set forth in the statute creating the UTC Program. The second tier will consider the extent to which the proposal addresses the more qualitative evaluation criteria.

Each of the current regional Centers has been subjected to annual site visits and performance reviews. If RSPA had found any to be performing in an unacceptable manner, it would not have awarded additional funding. But in no case is any of the regional Centers performing at a level that would disqualify it from competition. Neither has any achieved so exceptional a level of performance as to preclude the possibility of challenge by a serious competitor.

Mr. COLEMAN. Since each university transportation center is comprised of a consortium of regional universities, how will you address situations where only one proposal for funding is submitted from a federal region? How will you ensure a competitive process in such cases?

[The information follows:]

RSPA intends to apply the same standards applicable to all competitive requests for proposals. If only one party submits a proposal, and that party demonstrates compliance with the minimum standards of acceptability, that party will win the award.

### VOLPE CENTER—ACCEPTANCE OF WORK

Mr. COLEMAN. About two-thirds of the projects carried out by the Volpe Center are conducted for the modal administrations within Department of Transportation and about one-third for the Department of Defense and other agencies. What criteria does the Volpe Center use to determine whether to accept a project and whether the Volpe Center has the expertise to do the work?

[The information follows:]

When considering whether to accept new work, Volpe Center management follows three core documents that guide the work acceptance process: the Working Capital Fund statute (49 U.S.C. § 328 (a)), the DOT Strategic Plan, and the Center's mission statement. The Working Capital Fund statute charters the Center to "perform research, development, testing, evaluation, analysis, and related activities as the Secretary may direct for the Department, other agencies, state and local governments, other public authorities, private organizations, and foreign countries." Supporting this charter is the Center's mission statement: "In support of Departmental policy objectives, the Volpe National Transportation Systems Center shall anticipate future national, state, local, and international and logistics issues and requirements, and respond to current needs and priorities in accordance with its role as the national center of transportation and logistics expertise."

In addition to conforming to these documents, work acceptance is contingent upon a determination, at multiple management levels, that adequate federal staff and contractual resources are available to ensure good prospects for successful performance; governmental functions and, to the extent practical, that commercially available goods and services are to be used to maximum advantage.

Once accepted, however, all work is considered equally important and treated equitably, without regard for the basis for its acceptance.

RSPA is currently reviewing Volpe Center work acceptance guidelines and procedures to seek out enhancements where possible.

Mr. COLEMAN. The Volpe Center appears to broadly define its mission. I have several examples where I wonder whether the project was an appropriate use of the Volpe Center's resources and talent. These include projects where:

FHWA contracted with Volpe to design and construct a specially equipped meeting room at FAA headquarters,

OST contracted with Volpe to prepare a survey to determine why employees left DOT, and

FHWA contracted with Volpe to compile information on the cost of owning automobiles and vans.

Can you tell us what research expertise was applied by the Volpe Center in these particular projects that could not have been provided by the individual modal administrations?

[The information follows:]

The Volpe Center is not only a research center for the physical sciences; it also does planning, applications and analytical projects in economics, human factors, automated systems, statistics, policy analysis, and management and administration. These capabilities mirror the broad range of both technical and non-technical fields that directly relate to transportation, and that our clients require to fulfill their own missions. Thus, it is inaccurate to assume that the only "expertise" at the Volpe Center is "research expertise", or that the only "fields" at the Center are "hard sciences". In these three examples, the Center applied its expertise in automated systems (meeting room), management and administration (employee survey), and economics (cost of owning vehicles) in a manner that supplemented clients' limited personnel resources to accomplish these tasks on their own.

Mr. COLEMAN. In fiscal year 1993 the Volpe Center accepted $237 million in new projects, and $94 million in new (project) obligational authority has been accepted to date in fiscal year 1994. Why are you accepting new projects when it appears that you have a significant backlog of projects already in the pipeline?

[The information follows:]

Most of the funding received in fiscal year 1993 was not for new projects but for work in progress. There is no backlog in the sense of projects that have been accepted and funded but are subjected to a long delay before initiation of work. The funding may be received from a client at any point in the fiscal year. As a result, projects are not only multi-year initiatives, but they rarely begin and end with the Department's October 1 to September 30 budget cycle. In fiscal year 1993 the Volpe Center accepted $237.3 million in new obligational authority. Of the $237.3 million, $57.3 million was for new projects, the remaining $180 million was to continue work in progress or often multi-year initiatives. As of March 31, 1994, the Center accepted $108 million in new obligational authority, of which only $14.4 million was for new projects. The wide majority of the Volpe Center's workload is comprised of multi-year projects. In fact, most of the Center's projects are of several year's duration, and many large efforts are more than a decade old.

## VOLPE CENTER WORKLOAD

Mr. COLEMAN. Your 1992 business plan includes the following statements:

"Overall, demand for Volpe Center services exceeds supply. However, in anticipation of a need for expanded capabilities in specific areas, initiatives for increased work will be undertaken in specific market areas. . . . Line managers and senior project managers will be encouraged to seek work in the specified areas among current clients and other contacts."

Why do you believe it is necessary to generate work through Volpe Center initiatives when it appears that you are unable to meet your current workload?

[The information follows:]

The current workload at the Volpe Center is in fact being met. The Center does not accept tasks that it cannot reasonably fulfill within the time constraints negotiated with the clients.

The Volpe Center remains focused on responding to national needs and goals as identified and set forth by the President, the Secretary, the Deputy Secretary and the RSPA Administrator. As a result, the Center is regularly generating new initiatives in response to changing national priorities, e.g., ISTEA and CAAA. Priority projects initiated in previous years represent work in progress.

The quotation from the Business Plan (1992), which is currently being updated, refers to the fact that the national needs for transportation research and development are projected to shift. In particular, the Plan cites potential growing demand for Volpe Center support in such areas as environment, Intelligent Vehicle Highway Systems (IVHS), strategic planning, system assessment, and safety. In anticipation of this trend, the Volpe Center is attempting to enhance further its skills and capabilities and to expand its level of activity in these areas to better respond to these needs.

## VOLPE CENTER UNOBLIGATED BALANCE

Mr. COLEMAN. Please provide a chart that shows the Volpe Center Working Capital Fund unobligated balance at the end of fiscal year 1993 broken down by the year Volpe received the new obligational authority.

[The information follows:]

*Volpe Center unobligated authority by year received as of September 30, 1993*

[In millions of dollars]

| Year authority received: | *Unobligated balance* |
|---|---|
| 1993 | 142.7 |
| 1992 | 23.1 |
| 1991 | 11.1 |
| 1990 | 4.6 |
| Pre-1990 | 2.3 |
| Total | 183.8 |

## VOLPE CENTER OBLIGATIONS

Mr. COLEMAN. Please provide a chart that shows new obligational authority received by the Volpe Center in each month for each of fiscal years 1991 through 1993 and to date for fiscal year 1994.

[The information follows:]

## VOLPE CENTER NEW OBLIGATION AUTHORITY
## BY MONTH RECEIVED
## FY 1991 Through FY 1994 (MARCH)
## ($M)

| FISCAL<br>YEAR | OCT/NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1991 | 91.9 | 4.7 | 13.8 | 16.1 | 9.5 | 8.1 | 6.7 | 7.0 | 10.6 | 26.0 | 46.0 | 240.4 |
| 1992 | 6.3 | 97.9 | 12.9 | 3.3 | 4.7 | 4.7 | 2.7 | 13.0 | 7.3 | 10.9 | 46.0 | 209.7 |
| 1993 | 14.4 | 44.4 | 46.6 | 6.2 | 21.0 | 13.9 | 12.6 | 3.7 | 8.5 | 6.9 | 59.2 | 237.4 |
| 1994 | 42.7 | 16.0 | 33.0 | 2.1 | 15.0 | | | | | | | 108.8 |

## VOLPE CENTER—YEAR END OBLIGATIONAL AUTHORITY

Mr. COLEMAN. In each of fiscal years 1991--1993, approximately 22 percent of new obligational authority received by the Volpe Center was received in the last month of the fiscal year. Please provide a chart which identifies the source by sponsor of the amounts received by the Volpe Center in each of September 1991, 1992 and 1993?

[The information follows:]

### VOLPE CENTER NEW AUTHORITY RECEIVED IN SEPTEMBER BY SPONSOR

[In million of dollars]

| Sponsor | September | | |
|---|---|---|---|
| | FY 1991 | FY 1992 | FY 1993 |
| FTA | $0.6 | $3.6 | $0.8 |
| SBIR | 0.9 | 2.9 | 3.4 |
| USCG | 0.2 | 5.8 | 0.6 |
| Other DOT | 3.7 | 8.4 | 8.2 |
| FAA | (1.6) | 3.2 | 8.9 |
| Non-DOT | 42.3 | 22.2 | 37.3 |
| Total | 46.0 | 46.0 | 59.2 |

Mr. COLEMAN. How much of the new obligational authority received by the Volpe Center in each of September 1991, 1992 and 1993 would have lapsed if the funds had not been obligated by DOT modal administrations or other agencies to the Volpe Center?

[The information follows:]

| | Fiscal year— | | |
|---|---|---|---|
| | 1991 | 1992 | 1993 |
| Total Received ($M) | 46.0 | 46.0 | 59.2 |
| From Expiring Appropriations | 32.4 | 22.4 | 18.6 |
| Percent From Expiring Appropriations | 70 | 49 | 31 |

## VOLPE CENTER UNOBLIGATED BALANCE BY SPONSOR

Mr. COLEMAN. Please provide a chart that shows the unobligated balance of the Volpe Center Working Capital Fund as of September 30, 1993, by sponsor and by fiscal year received by the Volpe Center from the sponsor.

[The information follows:]

### VOLPE CENTER UNOBLIGATED AUTHORITY AS OF 9/30/93

[In thousands of dollars]

| Sponsor | Fiscal Year Authority Received | | | | | |
|---|---|---|---|---|---|---|
| | Pre-FY90 | FY90 | FY91 | FY92 | FY93 | Total |
| USCG | $25 | $83 | $154 | $4,081 | $13,151 | $17,494 |
| FAA | 363 | 1,615 | 1,081 | 4,333 | 38,256 | 45,648 |
| NHTSA | 105 | 126 | 7 | 189 | 3,760 | 4,188 |
| FHWA | 1 | 4 | 92 | 465 | 6,186 | 6,748 |
| MARAD | 106 | .............. | 5 | 85 | .............. | 195 |
| OST | 127 | 80 | 49 | 548 | 1,158 | 1,962 |
| FRA | 3 | 20 | 0 | 64 | 6,548 | 6,634 |
| RSPA | 28 | 4 | 60 | 383 | 3,057 | 3,531 |
| SBIR Pgm | 0 | .............. | .............. | 21 | 8,996 | 9,017 |
| FTA | 204 | 184 | 714 | 1,408 | 4,928 | 7,438 |

VOLPE CENTER UNOBLIGATED AUTHORITY AS OF 9/30/93—Continued

[In thousands of dollars]

| Sponsor | Fiscal Year Authority Received | | | | | |
|---|---|---|---|---|---|---|
| | Pre-FY90 | FY90 | FY91 | FY92 | FY93 | Total |
| Other DOT | 2 | ............ | 15 | 145 | 1,177 | 1,339 |
| Total DOT | 964 | 2,115 | 2,117 | 11,721 | 87,217 | 104,193 |
| DOD | 1,262 | 1,474 | 8,204 | 9,665 | 35,020 | 55,625 |
| Other | 97 | 1,049 | 701 | 1,740 | 20,444 | 24,031 |
| Grand Total | 2,323 | 4,638 | 11,081 | 23,127 | 142,681 | 183,849 |

## VOLPE CENTER OBLIGATIONAL AUTHORITY

Mr. COLEMAN. Please provide a chart that shows by sponsor the amount of new obligational authority received to date in fiscal year 1994 by the Volpe Center.

[The information follows:]

Volpe Center new authority as of March 31, 1994.

| Sponsor: | *New authority* |
|---|---|
| FAA | $68.1M |
| USCG | 4.1 |
| NHTSA | 1.1 |
| FHWA | 5.8 |
| FRA | 8.9 |
| SBIR Pgm. | 0.8 |
| FTA | 1.8 |
| Other DOT | 0.6 |
| Total DOT | $91.2M |
| DOD | 13.9 |
| Other | 3.5 |
| Grand Total | $108.7M |

Mr. COLEMAN. Please provide a chart that shows by sponsor new obligational authority received to date in fiscal year 1994 by the Volpe Center where the project work has not yet been initiated by the Volpe Center.

[The information follows:]

Of the $108 million in new fiscal year 1994 authority received through March, $14.4 million is for new projects. Of these, the following (about 21 percent) have not yet been started:

| Sponsor: | *FY 1994 Authority* |
|---|---|
| FAA | $750,000 |
| Other DOT | 300,000 |
| DOD | 1,912,000 |
| Total | [1] $2,962,000 |

[1] 81 percent was received in the last two months.

Mr. COLEMAN. Please provide a chart that shows by sponsor new obligational authority received in fiscal year 1993 by the Volpe Center where the project work has not yet been initiated by the Volpe Center.

[The information follows:]

Of the $237 million in new authority received in fiscal year 1993, $57 million was for new projects. Of these, the following (about 1 percent) have not yet been started:

| Sponsor: | *FY 1993 Authority* |
|---|---|
| OST | $30,000 |

| | |
|---|---|
| RSPA | 150,000 |
| FTA | 363,000 |
| DOD | 169,000 |
| Total | $712,000 |

### VOLPE CENTER UNOBLIGATED BALANCE

Mr. COLEMAN. What is the current unobligated balance Volpe Center Working Capital Fund?

[The information follows:]

As of March 31, 1994 the balance is $161.2 million.

### DEFENSE CONVERSION

Mr. COLEMAN. Would you describe for us RSPA's role in the Department's efforts to stimulate the application of defense-related research and development to the transportation sector?

[The information follows:]

Throughout the past year the Volpe Center has played an integral role, on behalf of the Secretary, in initiating and sustaining the Department's involvement in the Technology Reinvestment Project (TRP). This began in early June, 1993, when the Volpe Center assembled a package of current technology investment priorities in transportation and a list of DOT points of contact in these technology areas. This package was submitted to the Advanced Research Projects Agency, which is responsible for coordinating the Project. Shortly after that submission, the Department was asked to become a full partner in the TRP.

During the FY 1993 TRP Competition, the Volpe Center initiated the identification of DOT evaluators for 18 of the 28 technology sub-panels and evaluators for 10 of the Source Selection Evaluation Boards (SSEBs) and served as liaison for evaluators. In the most recent Technology Development portion of the TRP, twenty-seven (out of sixty-nine) cost-shared proposal awards, with a total face value of $420 million, were directly related to transportation. The federal share of the $420 million has yet to be negotiated, but may be as much as fifty percent. The Department will be managing nine of these winning projects, including a $39 million proposal for Advanced Automatic Train Control System, a $21 million project for Advanced Composites for Bridge Infrastructure Renewal, and a $13.9 million Commercial Shipbuilding Focused Development Project. Currently, the Volpe Center is looking ahead to identify new focus areas for the upcoming FY 1994 TRP.

Mr. COLEMAN. The Department's Strategic Plan indicates that the Department will work with other departments and agencies to direct the research and development funding for new transportation technology to meet our nation's needs and restructure DOT research and technology programs to complement and support this effort. How will the Department be able to leverage DOD investment in dual-use, military-transportation applications where you believe there is a high payoff in meeting transportation needs?

[The information follows:]

The National Science and Technology Council's (NSTC) Committee on Transportation R&D, chaired by DOT Deputy Secretary Mortimer Downey, is looking at the current state of transportation research within the federal government, establishing research priorities, and preparing recommendations for future research directions. In addition to the Department of Transportation, several other federal agencies are members of the Committee, including the Departments of Defense, Commerce, Energy, NASA, and EPA, along with the Executive Office of the President.

The Department's extensive involvement with this Committee, in addition to its knowledge of priorities and opportunities in transportation, will provide a mechanism to leverage federal R&D investment where there is a high payoff in meeting transportation needs.

### NEXT GENERATION CAR

Mr. COLEMAN. One of the transportation-related areas the administration has identified under the Technology Reinvestment Project [TRP] is the development of a next generation of the ultra-clean, ultra-fuel-efficient car. How is RSPA contributing to this effort?

[The information follows:]

Through the Department's Research and Technology Coordinating Council and Director of Technology Deployment, RSPA is coordinating the operating administrations' active participation in the Partnership for the New Generation Vehicle (PNGV) Initiative, a research effort involving the Federal Government and the Big Three automakers. Volpe Center technical expertise in this area will be applied to the program as it proceeds. The Volpe Center and NHTSA are providing DOT representatives for a planning committee of the PNGV. Their contributions include safety, fuel economy, and other issues related to the transportation system.

### OTHER DEFENSE CONVERSION OPPORTUNITIES

Mr. COLEMAN. What other areas has RSPA identified that offer promise for defense conversion opportunities in transportation?

[The information follows:]

While considering areas for future TRP consideration, the Volpe Center identified several that offer promise for defense conversion opportunities in transportation. These include: innovative high-performance materials and structures for infrastructure renewal, real-time monitoring of weather conditions, improved environmental measuring capabilities, non-destructive inspection technologies for infrastructure monitoring, and sensing automation tools to support vehicle traffic control and management in large systems.

### DUEL-USE TECHNOLOGY FUNDING

Mr. COLEMAN. Your justifications indicate that RSPA needs additional funding ($181,000) in fiscal year 1995 to support a variety of studies and focus groups to examine the most promising dual-use, military-commercial technologies, to examine market challenges in commercial transportation applications of dual-use technologies and to examine DOT's role in fostering technology partnerships.

Since the Department is already managing some $400 million in transportation TRP grants, why do you need additional funds and what do you hope to accomplish with the small amount of money requested in the RSPA budget?

[The information follows:]

The Department's approach in defense conversion has been to work with funding agencies like the Advanced Research Projects Agency (ARPA) and the National Institute for Standards and Technology (NIST) to "steer and guide" resources into transportation problems. However, DOT does not actually manage all of the $400 million plus of transportation-related projects awarded by ARPA's Technology Reinvestment Program. DOT will be serving as Executive Agent for ten of the projects, all of which are just now getting underway. As such, there has been little financial drain associated with these aspects of the projects as yet.

The DOT proposal is to conduct a series of analyses which will provide a substantial amount of leverage on the direction of the defense conversion activities, but which are not large in terms of absolute dollars involved. Essentially, it builds on directions already being established, but answers critical additional questions we cannot address under current resource constraints.

Discussions with sponsoring agencies make it appear unlikely that they will allow funding from ongoing project work to be diverted to analytical or management support. From the standpoint of objectivity, it would appear wise to have any analytical work on defense conversion funded independent of the various agencies supporting the actual project work.

## VOLPE CENTER—TRAVEL MODEL INVOLVEMENT

Mr. COLEMAN. One subject this subcommittee has been interested in is the area of travel model forecasting. As you know, the ridership forecasts for some of the new transit systems have been notoriously off the mark, and science of ridership forecasting is not well developed.

What is the Volpe Center's involvement in the Travel Model Improvement Program which is designed to develop the next generation of travel demand models and new approaches to travel forecasting?

[The information follows:]

The Volpe Center has received funds from the FHWA to support this program: $200,000 in fiscal year 1992, and $325,000 in fiscal year 1993. This support has included work on program design, network models, demand models, and other activities. No fiscal year 1994 funds have been received to date.

A draft report prepared by the Center, "Intermodal System Transportation Evaluation Program: Travel Model Improvements Study Design," described a proposed 5-year research plan in four areas: network modeling; demand modeling; activity allocation modeling; and data collection and analysis. The Center has been engaged in the design and prototype development of a multicriteria traffic assignment model that incorporates both cost and time into route choice, thus permitting more rational forecasts of highway and transit usage and improved testing of proposed road-pricing and parking policies. The Center produced a technical report identifying the data collection and transportation modeling requirements specified by recent Federal legislation, particularly the Clean Air Act Amendments and the ISTEA. The Center synthesized four travel demand research papers commissioned by the FHWA which asked consultants to describe their view of an updated set of planning models. The Center inventoried the extensive land use and transportation data available for the Boston region, dating back to 1950, and developed an implementation plan to produce an "urban data laboratory" that researchers could use to investigate the relationships between land use development and transportation improvements.

## VOLPE—KNOWLEDGE OF TRANSIMS

Mr. COLEMAN. Are you familiar with the transportation analysis and simulation system, a large-scale simulation model known as TRANSIMS, developed by Los Alamos National Laboratories?

[The information follows:]

As part of its Travel Model Improvement Program (TMIP) support, the Volpe Center was asked by the FHWA to critique the ongoing transportation simulation (TRANSIMS) development proposal from LANL, and a technical memorandum was prepared. In early Fiscal Year 1993, the Center also provided some technical advice to the FHWA regarding TRANSIMS, and, with FHWA, met several times with LANL staff.

Mr. COLEMAN. Some observers believe that the Los Alamos model is a high-risk effort of an unproven technology that will have the effect of drying up a considerable portion of future research and development funding for next generation travel demand models. However, the Federal Highway Administration believes that the TRANSIMS model offers superior promise in efforts to improve travel forecasting and is a "medium" risk effort that will not hinder short-term improvements in travel forecasting. With which view do you agree?

[The information follows:]

The Center believes that the TRANSIMS model may offer superior promise in travel forecasting but believes that it is lacking data. Many of the problems that have been encountered in travel demand modelling have been due more to inadequate data and to a state-of-the-practice that often falls far short of the current state-of-the-art of travel demand analysis. In allocating available funds, the Volpe Center would put greater emphasis on a wider variety of lower-risk, short-term improvements designed to expand the analytical "tool box" available to analysts for designing specific approaches to the broad range of issues they must address.

Mr. COLEMAN. To what extent does the TRANSIMS model offer the potential to gain a better method of modeling travel behavior and predicting how and why the population travels?

[The information follows:]

TRANSIMS may offer the potential of a better model of travel behavior. Improving our basic understanding of travel behavior and our ability to apply this knowledge to transportation analysis is dependent more on the breadth and quality of relevant data that can be obtained from primary and secondary sources within realistic time and dollar budgets. The Volpe Center believes that, to improve travel behavior analysis and forecasts, priority should be given to research aimed at improving data collection methodologies.

### REVIEW OF NEW JERSEY GAS PIPELINES

Mr. COLEMAN. The press release issued by the Department on March 29th on the Edison, New Jersey, gas pipeline explosion accident indicated that the Department will allocate additional personnel and funds to set up a temporary pipeline safety office in New Jersey to conduct a comprehensive review of all interstate natural gas transmission pipelines in the State. What do you hope to accomplish with this review and why do you believe it is necessary?

[The information follows:]

OPS will inspect and determine the compliance status of all the interstate gas transmission lines in New Jersey. In addition to reviewing operating and maintenance records, OPS plans to determine in the field the actual operating status of main line valves by assuring that they operate, assuring that regulators and relief valves are actually set at correct pressures, taking cathodic protection readings in numerous areas, and all rights-of-way will be patrolled looking for areas similar to the situation found at the Edison asphalt plant. Internal inspection tool records will also be reviewed.

OPS believes a comprehensive inspection with state agency participation is necessary to help assure that the lines are in compliance with the pipeline safety code and to help rebuild the confidence in the citizens of New Jersey in the interstate gas pipeline system. With a high concentration of pipelines in heavily populated areas, what we learn from the New Jersey investigation can then be applied to similar situations nationwide, providing RSPA with a critical risk assessment for interstate natural gas transmission lines.

Mr. COLEMAN. What is the source of funds that will be used to support the temporary pipeline office in New Jersey?

[The information follows:]

Funds for the temporary office in New Jersey will be drawn from the administrative account to cover the costs of inspector travel and equipment.

### ONE-CALL SYSTEMS

Mr. COLEMAN. RSPA has previously testified that excavation damage is the largest single cause of pipeline accidents. Construction-related damage was identified as the probable cause in last year's Reston, Virginia, oil spill and seems to be the culprit in the New Jersey accident as well.

In June, 1988, RSPA issued a notice of proposed rulemaking to mandate that all underground liquid and gas pipeline operators participate in excavation damage prevention programs, such as the "one-call" centralized notification systems operated in some States.

I understand that you now plan to publish a final rule by June 30 of this year.

Given the demonstrated effectiveness of such programs, why has it taken six years for RSPA to publish a final rule mandating participation by pipeline operators?

[The information follows:]

RSPA's regulations already require gas pipelines to have damage prevention programs in populated areas, and most liquid pipeline operators voluntarily conduct or participate in such programs. Therefore, initially we deferred this project to provide time to develop regulations of higher priority. One of our higher priority projects was to issue regulations that require states receiving pipeline safety grants to have one-call programs covering both pipelines and excavators in all areas where pipelines exist. Those regulations were published in September 1990 (49 CFR Part 198). We then began to develop additional regulations, to be proposed this summer, to ensure that interstate pipelines come under those state programs.

Mr. COLEMAN. In November 1993, the Office of Pipeline Safety announced that it would begin a national campaign to encourage states to adopt improved "one-call" systems to locate and mark underground pipelines. What are the elements of this campaign and what steps have been taken thus far?

[The information follows:]

OPS has developed a preliminary list of elements of a national campaign including:

Analyzing national and state accident statistics to validate the extent of outside force damage as an accident cause;

Documenting the degree to which accident reduction can be attributed to expanded use of one-call systems;

Targeting states for concentrated outreach to assist in their efforts to upgrade one-call systems;

Reviewing existing federal one-call legislation and regulations and recommending changes to improve one-call effectiveness; and

Furthering public education and awareness initiatives of the American Gas Association, American Petroleum Institute, Interstate Natural Gas Association of America, and other industry associations, including the possible development of public service announcements urging use of one-call systems.

Two meetings will be used to obtain input for finalizing the elements of the national campaign: the May 4 One-Call Systems and Damage Prevention Symposium in Minneapolis, Minnesota, sponsored by the American Public Works Association, and the May 10–11 Department of Transportation Pipeline Safety Advisory Committee meeting in Washington, DC.

OPS has hired a consultant to coordinate startup of the campaign. A major component of this effort is working with other interested parties to marshal available resources and garner support for strengthening state one-call systems. The national campaign is being given priority attention as an initiative in the Department's Strategic Plan under Goal 4, to promote safe and secure transportation. Of all the pipeline safety initiatives in the Strategic Plan, improving one-call systems may potentially have the highest payoff in terms of reducing pipeline fatalities, injuries, and priority damage.

Mr. COLEMAN. The pipeline industry has pointed out that pipeline operators are not the only ones who should be mandated to participate in "one-call" systems. They argue that construction contractors and others who dig around pipelines should be required to use "one-call" systems before digging, with appropriate penalties for noncompliance.

The 1992 Pipeline Safety Act authorizes criminal penalties for any excavator who fails to use an available "one call" system and subsequently damages a pipeline. How effective is such a sanction? Has anyone been prosecuted under this provision?

[The information follows:]

Since no one has yet been prosecuted under the criminal penalty provision, it is too early to tell how effective this sanction will be. Theoretically, the threat of a criminal penalty could be an incentive for a contractor to use a one-call system. As part of its national one-call strategy, OPS will be doing more in the coming year to publicize the existence of the criminal penalty through excavator and contractor trade associations (e.g., Associated General Contractors of America, American Public Works Association).

Mr. COLEMAN. What additional statutory or regulatory provisions might be useful in encouraging states to adopt civil penalties or other effective sanctions for "one-call" violations by excavators?

[The information follows:]

One of the elements of the national campaign will be to asses the various one-call enforcement and compliance measures currently being used in the states to determine their effectiveness. That assessment will provide a basis for recommending any additional statutory or regulatory provisions.

### PIPELINE SAFETY—CIVIL PENALTIES

Mr. COLEMAN. What would be wrong with legislation granting authority to the Department of Transportation to assess civil penalties against excavators found to have negligently or recklessly damaged interstate pipelines?

[The information follows:]

To exercise civil penalty authority over excavators, the Department would have to regulate and inspect the activities of potentially several hundred thousand persons who begin thousands of new excavations daily. Such an effort would be a mammoth undertaking that would overwhelm our compliance resources, and would largely duplicate the authority of OSHA to enforce its new excavation standards. A better approach would be to strengthen or clarify the existing OSHA authority.

### ONE-CALL SYSTEMS VS. GRANT FUNDING

Mr. COLEMAN. The justifications indicate that seven states do not have "one-call" systems and 30 States do not have the statutorily mandated level of civil penalty authority. Is it not a federal requirement that states have comprehensive "one-call" systems that meet minimum criteria as a condition of receiving federal pipeline safety grant awards? If so, why do states which do not meet these requirements continue to receive federal assistance?

[The information follows:]

In accordance with the Pipeline Safety Reauthorization Act of 1988, states which do not meet the minimum requirements for a one-call system do not receive the full grant allocation to which they would otherwise be eligible. In 1993, a state not in full compliance with the minimum one-call requirements lost 10 out of a total of 100 performance points, decreasing the amount of its grant allocation. Although a key element of an effective state program, the one-call requirement is but one component of an overall safety program. RSPA must be careful that in "punishing" a state for failure to have an effective one-call program, we do not undermine the other aspects of the state's safety program.

### PIPELINE INSPECTIONS

Mr. COLEMAN. A recent audit by the Inspector General of the Office of Pipeline Safety's central regional office found that the central region did not meet its goals for inspecting high-risk pipelines in 1991 or 1992, and RSPA has indicated that 1993 goals were not met either. Reasons cited for not meeting established goals were limitations in staffing, competing demands on inspectors' time, staff turnover, accident investigations, witnessing operator remedial actions and the Midwest floods.

In addition to the central region, which other regions are not meeting their inspection targets and why?

[The information follows:]

Two other regions did not meet their inspection goals for 1993. The Southwest Region met only 85 percent of its goal because of several factors including accident investigations, offshore liaison activities, and special assignments. The Eastern Region met only 56 percent of its 1993 goal because of major involvement in the Colonial Pipeline Company incident in Virginia.

Mr. COLEMAN. In September, 1993, the Office of Pipeline Safety convened a meeting of the five regional directors to reassess policies for setting inspection priorities and allocating inspection effort based on the need to address emerging program priorities in light of increasing workload and available resources. What were the results from your reassessment of your inspection policies?

[The information follows:]

Several changes were made to policies for setting inspection priorities.

Weighing factors in prioritization criteria were changed to give more weight to the presence of environmentally sensitive areas.

New goals were established for allocating inspectors' time over the 20 annual inspections per inspector. (The goal of 20 inspections per year per inspector with the top one-third prioritized by risk did not change). The change was to the remaining two-thirds which will not be one-third based on risk + time since last inspections and one-third new construction and accident investigation.

A team of inspectors will now review an operator's O&M plan at the operator's headquarters thus greatly reducing the repetitive reviews in each of the operator's district offices during standard inspections. This will leave more time for the field portion of each inspection which will improve the effectiveness of the inspection process.

Mr. COLEMAN. In 1990, RSPA established a goal of inspecting large pipeline operators every four years and small pipeline operators every two years. What impact will new mandates to inspect intrastate pipelines have on your ability to meet these inspection goals in fiscal year 1995 and beyond?

[The information follows:]

It is correct that many of the low stress, rural gas, and hazardous liquid gathering pipelines that will be brought under OPS regulations will be intrastate pipelines. For this reason, OPS is actively seeking more state liquid pipeline programs. However, it is clear that these newly regulated pipelines will put an additional burden on our inspection resources.

## PIPELINE INSPECTOR POSITIONS

Mr. COLEMAN. This subcommittee has been sympathetic in reviewing the Office of Pipeline Safety's staffing needs. In the conference report on the fiscal year 1994 transportation appropriations bill, the conferees provided funding for three additional pipeline inspector positions and directed that these positions be filled as soon as possible. Have the positions be filled and, if not, what are the reasons for the delay?

[The information follows:]

OPS issued vacancy announcements for all three positions earlier this year but did not receive applications from suitable candidates. OPS is currently readvertising the three positions and expects to fill them in fiscal year 1994.

Mr. COLEMAN. What is your current complement of federal pipeline inspectors and how does that compare with a year ago?

[The information follows:]

| | Fiscal year— | |
|---|---|---|
| | 1993 | 1994 |
| Eastern | 3 | 3 |
| Southern | 3 | 4 |
| Central | 5 | 5 |
| Southwest | 6 | 7 |
| Western | 5 | 6 |
| Headquarters (Drug and Alcohol) | 1 | 2 |
| Total | 23 | 27 |

We currently have a total of 27 inspectors and board, which is four more than last year. We are now in the process of hiring three inspectors within the next few months, and hope to have all positions filled by the end of the fiscal year.

### MEETING PIPELINE INSPECTION PRIORITIES

Mr. COLEMAN. The RSPA has announced that it will give inspections of newly constructed and low-stress hazardous liquid pipelines a higher priority. How will you accommodate these additional priorities in a program that is already stressed in meeting current inspection goals?

[The information follows:]

OPS has requested funding in fiscal year 1995 for contractor personnel to conduct a majority of new construction inspections and some aspects of accident investigations, augmenting OPS resources and helping OPS attain its inspection goals. With the increase in inspection units, however, it may mean a longer period between standard inspections of certain pipeline operators.

### PIPELINE SAFETY—USE OF CONTRACTORS

Mr. COLEMAN. The justifications indicate that in fiscal year 1995 the Office of Pipeline Safety will require $325 thousand to hire contract personnel to conduct a majority of new construction inspections and accident investigations when existing engineering staff are not available. Federal regulations prohibit the use of contractors to supplement the federal labor force in the performance of inherently governmental functions.

I would consider pipeline safety enforcement to be an inherently governmental function. Why do you believe it appropriate to use private contractors for this purpose? Have you sought a ruling from RSPA's chief counsel on this issue?

[The information follows:]

In conducting new construction inspections and some aspects of accident investigations, contractor personnel will be serving as observers and fact finders on-scene. They may report on probable violations, but they will not be involved in decisions on whether enforcement actions will be taken. Their reports and observations will be turned over to the OPS regional office for further action. As we develop work statements for contract personnel, we will ensure that the functions performed are not inherently governmental.

### COLONIAL ACCIDENT—LESSONS LEARNED

Mr. COLEMAN. What lessons has RSPA learned from last year's Colonial pipeline oil spill in Reston, Virginia, that could prevent similar accidents?

[The information follows:]

The accident re-focused attention on the need to adopt several pending rulemakings on subjects implicated in the Colonial failure. One such rulemaking would extend damage prevention programs to hazardous liquid pipelines. Also, an accompanying notice will propose to require participation in one-call systems by all the pipeline operators.

Another rulemaking in progress would specify those circumstances under which operators of hazardous liquid pipelines would be required to use emergency flow-restricting devices in conjunction with a leak detection system, in order to locate and minimize the extent of a spill.

The appropriate use of instrumented internal inspection devices is also important. On April 12, 1994, RSPA published a rule requiring that certain new and replaced pipelines be constructed to accommodate instrumented internal inspection devices (smart pigs). RSPA has now begun a rulemaking project to prescribe the circumstances under which smart pigs, or other inspection methods at least as effective as smart pigs, are to be used for the periodic inspection of pipelines in populated or environmentally sensitive areas.

Finally, this accident highlights the need for response planning and drills that will mitigate the consequences of spills from oil pipelines. RSPA published an Interim Final Rule in January 1993 that required oil pipelines to develop and file oil spill response plans to RSPA. We plan to issue a Final Rule in the Fall of 1994.

In addition, the necessity and value of complete and accurate maps has been demonstrated by the accident, both with respect to the effective application of local land use controls, but also for informing citizens of the potential risks they face in living close to a pipeline. We are drafting a Notice of Proposed Rulemaking on this subject, which we hope to issue later this year.

## COLONIAL ACCIDENT COSTS

Mr. COLEMAN. How much did this incident cost in terms of environmental damage, cleanup costs and economic losses associated with the pipeline being closed or operated at a lower capacity?

[The information follows:]

Colonial has estimated that the total cost of this failure is $10 million.

Mr. COLEMAN. How much did it cost RSPA to investigate this accident and to report on its findings? Should RSPA have the authority to seek reimbursement for its costs from companies involved in incidents?

[The information follows:]

It is estimated that about $250,000 was spent on the Colonial Pipeline investigations. The investigation is not closed and additional costs will continue to add up.

RSPA does not have the authority to seek reimbursement for its costs. It may be useful if a mechanism is set up for RSPA to be reimbursed for these costs. In addition to the costs, the time devoted to these major investigations prevents OPS from fully carrying out its risk based inspection program and congressional mandated rules and studies on schedule.

## STATE OF VIRGINIA PLANNED RESPONSIBILITIES

Mr. COLEMAN. As a result of the Reston accident, the state of Virginia plans to take over pipeline inspections that were previously performed by the federal government. What pipeline safety responsibilities will be assumed by the state and what responsibilities will continue under RSPA in Virginia?

[The information follows:]

Legislation has been passed by the Virginia General Assembly and is before the Governor for signature giving the Virginia State Corporation Commission authority for overseeing the safety of intrastate hazardous liquid pipelines. If signed, the Commission would assume safety jurisdiction over intrastate hazardous liquid pipelines, and OPS would continue its jurisdiction over interstate hazardous liquid pipelines. Once the state establishes an intrastate program and has qualified personnel, it will be eligible to become an OPS agent for inspecting interstate operators in Virginia (any probable violations of the regulations would be referred to OPS for enforcement).

## NTSB SAFETY RECOMMENDATIONS

Mr. COLEMAN. Has the NTSB made any safety recommendations to RSPA for improving the safety of pipelines as a result of its investigation of the Reston accident?

[The information follows:]

The NTSB has not made any recommendations to RSPA for improving the safety of pipelines as a result of its investigation of the Reston accident. Rather, because NTSB also investigated a 1991 Colonial Pipeline accident that involved mechanical damage sustained during previous excavation, also resulting in a large release of diesel fuel that affected a major water supply, the NTSB is conducting a special investigation to explore safety issues related not only to Colonial, but also to the petroleum product pipeline industry in general. The Board may issue safety recommendations based on this investigation.

## COLONIAL ACCIDENT—USE OF SMART PIG

Mr. COLEMAN. After the incident, RSPA asked Colonial to inspect its pipeline with a "smart pig". The inspection revealed additional pipeline defects that were then repaired. In hindsight, do you believe that earlier use of smart pig inspections had the potential for revealing the defects and allowing repairs that could have prevented the incident?

[The information follows:]

Usually, smart pig inspections are for the purpose of detecting metal loss as the result of corrosion. Using that pre-existing technology, the damage that caused the accident may not have been indicated. However, the smart pig runs on the 36-inch Colonial pipeline used evolving evaluation technology that was not previously proven. That technology was applied specifically to indicate locations of potential damage to the pipe after RSPA had recognized multiple sites of mechanical damage in the lengths of pipelines excavated at Reston. Had that technology been applied during the interval between damage to the pipeline and the accident, it is highly probable that the damage would have been detected and the accident prevented.

## COLONIAL ACCIDENT—PIPELINE SAFETY ACTION PLAN

Mr. COLEMAN. After the Colonial spill, Secretary Pena directed RSPA's Office of Pipeline Safety (OPS) to develop an action plan to respond more quickly and comprehensively to pipeline spills that pose potential environmental hazards. That plan involves accelerating five rulemakings that address pipeline safety and environmental issues: Hydrostatic testing of older pipelines; previously excepted low-stress pipelines; smart "pigging" of new and replaced pipelines; "one-call" damage prevention programs; and emergency flow restricting devices.

We have talked about the "one-call" damage prevention program regulation. Would you give us a brief status report on where the other rulemakings stand and when you plan to complete action on each?

[The information follows:]

| Rulemaking | Status | Schedule |
|---|---|---|
| Hydrostatic testing of older pipelines (renamed pressure testing). | Final rule under development | Publish final rule 6/94. |
| Previously excepted low stress pipelines | Final rule under development | Publish final rule 6/94. |
| Smart "pigging" of new and replaced pipelines. | Completed | Final rule published 4/12/94. |
| Emergency flow restricting devices | ANPRM published 1/19/94; RSPA reviewing comments. | Publish NPRM, 9/94; final rule, 9/95. |

### PIPELINE SAFETY RULEMAKINGS

Mr. COLEMAN. RSPA has indicated that, as a result of accelerating these five high priority rulemakings under OPS' environmental action plan, 19 other pipeline rulemakings will receive a lower priority. RSPA already has a significant backlog of rules which are mandated under the 1992 and 1988 pipeline safety acts. Which significant rulemakings will be further delayed as a result of your increased focus on pipelines in environmentally sensitive areas?

[The information follows:]

Current significant rulemakings that will be delayed are Maps and Records, Pipeline Inventory; Definition of Gas Gathering Line; Regulatory Review: Gas Pipeline Safety Standards; and Response Plans for Onshore Oil Pipelines.

### PIPELINE SAFETY REQUESTED POSITIONS

Mr. COLEMAN. Is it accurate that RSPA requested 16 additional positions for pipeline safety from the Department in the fiscal year 1995 budget cycle and was granted three new positions?

[The information follows:]

Yes, that is correct.

### SFTA—REGULATORY ANALYSIS

Mr. COLEMAN. The regulatory analysis conducted by the Volpe Center concluded that the potential benefits of the proposed regulation would be $69.4 million per year, with the annual cost estimated to be $5.3 million. However, aren't these benefits highly speculative given the lack of available information on the extent to which food is contaminated during shipment and any resulting injury or illness that occurs?

[The information follows:]

Given the lack of systematic and extensive data on the scope and frequency of food products being contaminated during transportation, the regulatory evaluation was based on information that had to be inferred and derived through modeling industry transportation practices. As such, the benefit estimates are subject to various degrees of uncertainty. Although every effort was made to base the estimates on conservative and plausible assumptions, the uncertainty associated with the benefit estimates is not known and could be substantial.

### PROPOSAL TO REPEAL SFTA LEGISLATION

Mr. COLEMAN. RSPA's justifications suggest that the Department will submit legislation to repeal SFTA. However, I understand that the authorizing committees have not been very receptive to this proposal. Do you still plan to submit repeal legislation?

[The information follows:]

Repeal of the legislation is one of several options that we are currently considering. We have not made a final decision at this time.

### APPROPRIATE AGENCY FOR SFTA REGULATION

Mr. COLEMAN. At the time that SFTA was considered in Congress, the general counsel of the Department maintained that the Food and Drug Administration (FDA) in HHS was the appropriate agency to regulate food transportation and that the FDA had existing authority under the Federal Food, Drug and Cosmetic Act to do so. Is that still the Department's position and does the FDA agree with you?

[The information follows:]

The Department did not request funds in the President's budget to support SFTA in FY 1995. In the budget submission, the Department proposed to abolish the program and indicated that legislation would be required to do this. The submission also indicated that the Food and Drug Administration of HHS has the necessary regulatory authority and operational structure to address the SFTA mandates. The Department is exploring several options to address SFTA in FY 1995.

Mr. COLEMAN. What actions has HHS taken to pursue the proposal? Has HHS made provisions in its budget request for funds to implement this program?

[The information follows:]

We are not aware of any request by HHS to seek funding for SFTA.

## EMERGENCY PREPAREDNESS GRANTS COLLECTIONS

Mr. COLEMAN. Funding for the emergency preparedness grant program comes from fees paid by hazardous materials carriers and shippers. Hazardous materials carriers and shippers must annually file a registration statement with RSPA and pay an annual fee of $250 to support the emergency preparedness program activities and an administrative processing fee of $50.

On April 1, the RSPA Administrator wrote to the governors of those states that participate in the hazardous materials emergency preparedness planning and training grant program that RSPA would be able to fund only 70 percent of the amounts made available for state grants in the fiscal year 1994 Transportation Appropriations Act. This action is based on an estimated $2.5 million shortfall in program funding for fiscal year 1994.

What is the reason for the shortfall in projected registration collections?

[The information follows:]

When this program was initiated in 1992, the number of persons subject to the registration program was not known. After two years of extensive efforts to inform the hazardous materials industry of the registration requirements, approximately 26,000 persons have registered for each year. Fees collected for grant purposes have totalled approximately $6.6 million per year. Additionally, we will be examining various initiatives to ensure that the grant program is placed on a sound and stable funding basis.

Mr. COLEMAN. Last year, you told us that you anticipated collecting $17.4 million in registration fees in fiscal year 1994. What registration receipts are you currently projecting for fiscal year 1994 and what is the reason for the large discrepancy?

[The information follows:]

RSPA expected that, as the hazardous materials registration program became better known and understood, the number of registrants would increase to approximately 69,000 in fiscal year 1994. Despite an extensive public information program and increased enforcement activity in fiscal year 1994, approximately the same number of persons have registered for each of the two years the program has been in existence. The apparent stability in the number of registrants for registration years 1992–93 and 1993–94 reflects both persons newly registered in 1993–94 and persons who registered for 1992–93 but realized in 1993–94 that they are not required to register. RSPA published a notice of proposed rulemaking on April 1, 1994, that, in part, proposed a new requirement that shippers verify that carriers are registered before using their services and that carriers verify that shippers are registered before accepting hazardous materials for transportation from them. If adopted as a regulation, this proposal could result in an increase in the number of registered persons. RSPA believes, however, that the total number of registrants for the 1994–95 registration year is unlikely to exceed 30,000. Projected collections from

30,000 registrants at $250 each for the 1994–95 registration year amount to a total of $7.5 million.

Mr. COLEMAN. Since registration fees are due each July, shouldn't you have known about a potential shortfall last year? When did RSPA first become aware that registration fees were falling far short of expectations?

[The information follows:]

A year ago the registration program was still within its first operational year and RSPA expected that the number of registrants would significantly increase during the second operational year as knowledge of the program grew and enforcement efforts were increased. By late 1993 we were aware that the collections were falling short of the estimated projections for the second operational year, and a program review was initiated to consider the issues involved and possible solutions. RSPA expects to propose and implement regulatory changes that address this issue by next year if collections remain static this year.

## EMERGENCY PREPAREDNESS GRANTS COMPLIANCE

Mr. COLEMAN. Last year, we discussed the low level of compliance among hazardous materials carriers and shippers who must register and pay a registration fee. In materials supplied last year, RSPA told the Subcommittee that it expected about 69,000 persons to register. However, only about 28,000 persons have registered for the current registration year. That is a compliance rate of about 40 percent. What are the reasons for such a low compliance rate?

[The information follows:]

Although it is quite certain that there are persons required to register who have failed to do so, efforts such as Roadcheck '93 indicate that registration compliance is relatively high, at least among persons generally recognized as part of the hazardous materials transportation industry subject to the Federal regulations. It is possible that persons generally regarded as being outside the purview of the Federal hazardous materials regulations but who are required to register (intrastate motor carriers, for instance) are still unaware of the applicability of this requirement to their particular situations. RSPA is continuing its efforts to make the program better known and to encourage the DOT modal administrations and state and local government agencies to extend their enforcement efforts. RSPA also continues to consider alternatives that would address the shortfall of grant funds in time to meet the fiscal year 1995 grant requests.

Mr. COLEMAN. What new enforcement strategies are you developing to improve compliance and increase registration fee collections?

[The information follows:]

RSPA continues to work with the modal administrations within the Department on a uniform and comprehensive outreach and enforcement program to ensure that all persons subject to the registration requirements have had an opportunity to be made aware of the program's requirements and to enforce compliance. FHWA, FRA and RSPA have all cited persons for non-compliance nationwide. FHWA, at RSPA's request, undertook a special study during Roadcheck '93 (an international cooperative commercial vehicle inspection effort) and cited motor carriers who were not complying with registration requirements. RSPA is working with the Public Utilities Commission of Ohio (PUCO) under a pilot program to better examine the extent of compliance by highway carriers subject to the federal registration program who also transport certain hazardous materials in or through Ohio. The PUCO, for example, has agreed that it will not register a person in its state registration program until that person verifies registration in the federal program, if required to do so. The Ohio registration program is part of a broader demonstration program sponsored by the Department under a FHWA contract with the National Governors' Association to test the recommendations of the Alliance for Uniform HAZMAT Transportation Procedures (the Alliance) for a uniform state registration and permitting program. Three other pilot states, Nevada, Minnesota, and West Virginia will also be participating in the Alliance program although not directly with RSPA. As a result of all four pilot states participating in the Alliance program, increased awareness of, and registration in, the federal registration program is anticipated.

### EMERGENCY PREPAREDNESS GRANTS—BUDGET VS. REVENUES

Mr. COLEMAN. RSPA is requesting an obligation limitation of $11.35 million for the emergency preparedness program in fiscal year 1995, including $10.35 million for state planning and training grants. Are you confident that registration revenues will be sufficient to support this level of program activity? What are your current projections for collections in fiscal year 1995 as compared with the $15 million in collections estimated in your budget justifications?

[The information follows:]

RSPA has estimated a registration revenue shortfall of approximately $2.5 million for fiscal year 1994; after two years, approximately 26,000 persons have registered each year and have generated collections of $6.6 million per year for grant purposes. Revenue projections are uncertain because we continue to work with several unknowns—the exact population of shippers and carriers involved in the transportation of hazardous materials in general and, specifically, the population subject to the registration program. RSPA has taken immediate corrective steps by issuing a notice of proposed rulemaking on April 1, 1994, that would require shippers and carriers to ensure that each are registered before both may engage in a covered registration activity during FY 94. The beneficial impact of this shipper/carrier compliance provision would carry over into FY 95 and beyond. RSPA is also working with selected states to better enforce the registration requirements. By FY 95, RSPA expects to embark on new rulemaking proposals which may include a review of the scope of hazardous materials covered, persons subject to the registration requirements, and the amount of the fee based on the amount of hazardous materials offered or transported by a registrant. Based on the outcome of these scenarios, we expect that registration revenues of $15 million will be achievable.

### EMERGENCY PREPAREDNESS GRANTS REPORT

Mr. COLEMAN. In the report accompanying the fiscal year 1994 transportation appropriations bill, the Committee requested a report by March 1 on the implementation of the emergency preparedness grants program, its administrative requirements and performance measures that can be used to judge the program's results. What can you tell us about this report and why we have not received it?

[The information follows:]

The report is now in internal coordination and will be transmitted shortly.

Mr. COLEMAN. Why should we provide additional funding for the emergency preparedness program if we do not know whether the program is achieving its purpose?

[The information follows:]

The HMTA grant program is training 180,000 hazardous materials emergency responders annually and providing the only federal funds available to the nation's 4000 Local Emergency Planning Committees (LEPC's). Without HMTA, funding, responders and LEPCs would be less able to effectively cope with the hazards involved in transporting the millions of tons of hazardous materials annually.

### HAZMAT SAFETY LEVEL

Mr. COLEMAN. In January, the Department submitted its report to Congress, "Improvements to Hazardous Materials Identification Systems". This report responds to a Congressionally mandated study conducted by the National Academy of Sciences (NAS) on the feasibility of and need for a nationwide central reporting and computerized data center to provide real-time monitoring of hazardous materials shipments. The Department's report makes the following statements:

"NAS found that, in most instances, the existing hazardous materials communication system works and the information sources available at the scene of a hazardous materials transportation incident meet critical information needs of emergency responders. DOT finds that, while some improvements may be appropriate, the existing system provides a satisfactory level of safety when properly implemented in compliance with the existing regulations."

How does RSPA define "a satisfactory level of safety" in this context?

[The information follows:]

RSPA believes that a high level of hazmat transportation safety has been demonstrated over the years; no fatalities by any of the modes, except highway, have been reported during a hazmat incident since 1986. NAS projected that based on the annual number of hazardous materials incidents involving a truck, about 1 percent (100 to 200) would involve consequential incidents with an information problem; for similar hazardous materials incidents involving rail; less than one-half of 1 percent (4 to 6) would occur based on NAS projections. DOT and others have estimated that about 500,000 shipments of hazardous materials are moved each day nationwide. The vast majority of these shipments are packaged properly, meet other stringent requirements, and arrive at their destination safely. While RSPA does not consider any number of hazardous materials incidents by any mode satisfactory, we mitigate incidents through a system of regulations that include hazardous materials classification, packaging hazard communication, training, and operational rules. Furthermore, RSPA believes that public safety needs are being met in a most timely and effective manner by providing callers with immediate technical advice on responding to incidents through its communications link with the Chemical Manufacturers Association's Chemical Transportation Emergency Center (CHEMTREC) and its notification of either an Environmental Protection Agency or United States Guard on-scene coordinator.

### HAZMAT—PERFORMANCE OF INFORMATION SYSTEMS

Mr. COLEMAN. RSPA's report finds that the existing system works when there is compliance with the regulations. However, the National Academy of Sciences found that violations of federal requirements for hazardous materials placarding occur in about 30 percent of commercial truck inspections, and violations of shipping paper requirements occur in about 25 percent of such inspections, based on FHWA data. Given this level of noncompliance, isn't it misleading to say that the system works when there is compliance?

[The information follows:]

We don't believe so. While NAS does conclude that compliance with certain sections of the Hazardous Materials Regulations (HMR) may be less than adequate, it goes on to say that frequency is not a reliable indicator as used by FHWA, because enforcement practices vary widely by jurisdiction and because vehicles inspected are not a representative sample of the population. RSPA, in an effort to gain a better understanding of the causes of information failure of the existing hazard communication system, has initiated a contract effort to monitor the extent of, and reason for, noncompliance with placarding and shipping paper requirements of the HMR. Upon completion of this study, RSPA will be in a better position to develop and apply appropriate regulatory, training, and enforcement actions.

### SERIOUS HAZMAT INCIDENTS—DEFICIENCIES

Mr. COLEMAN. Your analysis of the 9,300 hazardous materials incidents that occurred in 1992 indicated that only about 396, or 4 percent of the total, had a consequence, like death or injury or evacuation, serious enough to warrant a significant emergency response. The results of the work of the National Academy of Sciences suggest that emergency response information is seriously deficient in about 200 serious incidents each year or about half of all such incidents.

Among the deficiencies noted were inaccurate placards and shipping documents, placards and shipping documents that had been destroyed or were obscured due to a crash or fire, and drivers who could not provide accurate information about their cargo at the scene of the accident. How are you attacking these problems which seem to be prevalent in serious incidents?

[The information follows:]

The analyses conducted by RSPA and NAS differed in that RSPA identified those incidents in which there were serious consequences reported to us. NAS's methodology relied on extrapolating from a small number of case studies in which emergency response information was reported together with a serious consequence. NAS estimated that about 1 percent (200) of the truck incidents nationwide would have both an information problem and a serious consequence and, of these 200 incidents, NAS estimated that less than 4.0 percent would clearly have an information problem attributed to placarding or shipping paper losses because of a crash or fire. NAS noted that the consequences it cited may or may not have been attributed to the information problem. DOT identified in its report to Congress, beginning on page 20, a number of regulatory, enforcement, and training actions it is taking. For example, RSPA has initiated a rulemaking proceeding to address placarding and hazard communication issues under Docket HM–206; RSPA has undertaken a contract to design a study to determine the extent to which shippers and carriers may not be in compliance with the placarding and shipping paper requirements of the HMR and also to determine the reasons for any noncompliance; and, RSPA has issued uniform industry training requirements which became mandatory on October 1, 1993.

### IMPROVEMENTS IN HAZMAT INFORMATION SYSTEMS

Mr. COLEMAN. What improvements in existing hazardous incident information systems are you considering or implementing?

[The information follows:]

RSPA is proposing under Docket HM–200 that all intrastate carriers and shippers be required to comply with the Hazardous Materials Regulations (HMR) including those provisions pertaining to filing incident reports. This rulemaking proceeding, when effective, is expected to increase our Hazardous Materials Information System's (HMIS) coverage to include intrastate hazardous materials incident spill data important to NAS and first responders. RSPA has ensured that existing regulations require placarding and shipping paper information be reported to us. For example, RSPA, in its "Guide for Preparing Hazardous Materials Incident Reports," requests that both the type of shipping paper and its identification number be specified on the incident report. Also, RSPA requests that the label or placard information found on the package be entered, or its absence noted.

### HAZMAT AUTOMATED TRACKING SYSTEM

Mr. COLEMAN. The NAS recommended that the federal government should not implement a national central reporting system but should undertake more limited demonstrations of the feasibility of using automated information systems in both the rail and trucking industries for tracking and identifying hazardous materials shipments. Some members of Congress have advocated that authorization for such demonstration efforts should be included in the Hazardous Materials Transportation Act amendments to be considered by Congress this year. What is RSPA's position on the need for and desirability of such legislation?

[The information follows:]

DOT in its report to Congress, noted that the example provided by NAS concerning emergency responder access to rail industry car-tracking and waybill data systems is being addressed by DOT. FRA has initiated the Houston Cooperative Emergency Planning Project which is aimed at assisting emergency responders. FHWA is also accelerating an application under its Intelligent Vehicle Highway System (IVHS) to address the NAS concern to incorporate hazardous materials monitoring functions in truck automatic electronic identification corridor demonstration projects. On April 18, 1994, the Department responded to the Chairman of the Committee on Commerce, Science, and Transportation of the United States Senate, and provided its views in anticipation of Senate action to reauthorize the Hazardous Materials Transportation Act. DOT supports Section 8 of S. 1640, which requires the Secretary to ensure that the National Intelligent Vehicle-Highway Systems Program addresses, in a comprehensive and coordinated manner, the use of system technologies to promote hazardous materials transportation. The Department also supports Section 6 of H.R. 21.78 which allows the Secretary to make grants to one or more persons (including states or local governments) to carry out a pilot project to demonstrate the feasibility of establishing and operating computerized telecommunications emergency response information technologies to store and retrieve information for response to incidents involving hazardous materials transportation by motor carriers.

### NTSB—OPEN UNACCEPTABLE ACTIONS

Mr. COLEMAN. Please provide a summary of each NTSB recommendation made to RSPA which is still classified as "open-unacceptable action", similar to the data provided on pages 803–804 of last year's hearing record. For each, explain why you have not taken action acceptable to the NTSB. Group these recommendations separately for hazardous materials, pipeline safety and other.

[The information follows:]

## HAZARDOUS MATERIALS

H-89-36 recommends that RSPA delete provisions in the Federal Motor Carrier Safety Regulations that permit certain vehicles to cross industrial grade crossings without stopping.
A working group was formed with representatives from RSPA, the Federal Highway Administration (FHWA), and the Federal Railroad Administration (FRA) to analyze the accident/incident data relevant to industrial grade crossings. Analysis of the industrial grade crossing data shows that accidents have been decreasing steadily over the last fifteen years and that in five of the last ten years there were no industrial grade crossing accidents involving hazardous materials. We believe that the evidence does not warrant a change to current regulations and are requesting the NTSB to reclassify the recommendation as "Closed-No Longer Applicable".

YI-81-03 recommends that RSPA develop and use a common shipper identifier in all DOT hazardous materials compliance records. Under RSPA's leadership, a Departmental working group designed, developed and put into operation a shipper data system which is responsive to the recommendation. We are requesting NTSB to reclassify this recommendation as a "Closed-Acceptable Action".

R-89-83 recommends that RSPA develop procedures to develop and correct in a timely manner, errors in the Emergency Response Guidebook. We recently submitted an alternative approach to address this issue which required further development of risk classification methodology. NTSB classified the recommendation as unacceptable until the risk methodology is developed. We plan to complete the model this year and will resubmit our request to close this recommendation.

## PIPELINE SAFETY

There are eight recommendations for pipeline safety that are in the status of either "Open-Unacceptable Action" (OUA) or "Open-Unacceptable Response" (OUR). Following is a synopsis of these recommendations and the current OPS action on each:

P-87-2 Qualification of pipeline personnel. (NTSB Status: OUR)
P-87-2 recommends that RSPA amend the pipeline safety regulations to require operators to annually qualify employees. A Notice of Proposed Rulemaking is under development and will be published later this year.

P-87-6 Passage of internal inspection devices. (NTSB Status: OUR)
P-87-6 recommends that RSPA require operators to install facilities to incorporate the use of internal inspection devices (smart pigs) when repairing their systems. A final rule was published April 12, 1994 (59 FR 17275).

P-87-7 Passage of internal inspection devices. (NTSB Status: OUR)

P-87-7 recommends that RSPA require new pipelines be constructed to facilitate use of smart pigs. A final rule was published April 12, 1994 (59 FR 17275).

P-87-23 Safe service intervals. (NTSB Status: OUA)
P-87-23 recommends that RSPA establish criteria for determining safe service intervals between hydrostatic retests. Action on this recommendation is awaiting risk assessment prioritization of pipeline safety issues. The risk assessment prioritization is due December 1994.

P-88-1 Establish maximum allowable concentration of hydrogen sulfide ($H_2S$) in gas pipelines. (NTSB Status: OUR)
P-88-1 recommends that RSPA establish maximum allowable concentration of $H_2S$. Based on the comments to the NPRM proposing these requirements, RSPA concluded that $H_2S$ is not hazardous in transmission lines because:

- no injuries or deaths have been attributed to $H_2S$ in gas transmission lines;
- $H_2S$ releases into gas transmission lines have been very infrequent, for extremely short durations, and for very minute amounts of $H_2S$;
- $H_2S$ released into transmission lines remains confined and it is extremely unlikely that there would be a leak in the transmission line at the same time and in the same general vicinity as the $H_2S$ release; and

- $H_2S$ released into a transmission line will be diluted by natural gas coming in from other natural gas processing plants.

The previously published NPRM will be withdrawn and the focus of regulation development regarding $H_2S$ will be redirected from transmission to gathering lines, lines that routinely carry gas containing $H_2S$. Further action is awaiting risk assessment prioritization due December 1994.

P-88-2 Require reporting all incidents where $H_2S$ concentration is in excess of maximum allowable concentrations. (NTSB Status: OUR)
P-88-2 recommends that RSPA require reporting of all incidents where $H_2S$ is in excess of maximum allowable concentrations. Based on the comments to the NPRM proposing these requirements, RSPA concluded that hydrogen sulfide is not hazardous on transmission lines for the reasons stated in Recommendation P-88-1 above. The previously published NPRM will be withdrawn and the focus of regulation development regarding $H_2S$ will be redirected from transmission to gathering lines, lines that routinely carry gas containing $H_2S$. Further action is awaiting risk assessment prioritization due December 1994.

P-88-3 Require installation of equipment to detect excess concentrations of $H_2S$. (NTSB Status: OUR)
P-88-1 recommends that RSPA require the installation of equipment to detect excess concentrations of $H_2S$. Based on the comments to the NPRM proposing these requirements, RSPA concluded that

hydrogen sulfide is not hazardous on transmission lines for the reasons stated in Recommendation P-88-1 above. The previously published NPRM will be withdrawn and the focus of regulation development regarding $H_2S$ will be redirected from transmission to gathering lines, lines that routinely carry gas containing $H_2S$. Further action is awaiting risk assessment prioritization due December 1994.

P-90-21 Assess industry programs for educating the public on dangers of gas leaks. (NTSB Status: OUR)
P-90-21 recommends that RSPA assess industry programs for educating the public on the dangers of gas leaks. The RSPA published Advisory Bulletin ADB-93-02 (58 FR 18443; April 9, 1993) urging operators to review and assess their public education programs for compliance with § 192.615(d). By letter of April 22, 1994, NTSB advised RSPA that they do not regard this as being adequately responsive to OPS-NTSB discussions as well as P-90-21, and are therefore encouraging RSPA to investigate or identify other techniques for increasing the effectiveness of public education programs. Accordingly, NTSB now classified P-90-21 as "Open-Unacceptable Response."

## RSPA RULEMAKINGS—MAJOR STAGES

Mr. Coleman. Please provide a chart which shows the number of months it took to reach each major stage of the rulemaking process (e.g. ANPRM, NPRM, final rule) for each of RSPA's rulemakings completed over the past two years.

[The information follows:]

| HM Docket Number | Rulemaking Description | Date Federal Register | Status | Time To Complete |
|---|---|---|---|---|
| **HM-126F** | **Training for Hazmat Workers** | | | |
| | Project initiated | 7/88 | | |
| | | 07/26/89 | NPRM | 12 |
| | | 08/15/89 | Notice | |
| | | 05/15/92 | FR | 34 |
| | Correction | 05/27/92 | FR | |
| | Response to Petitions | 01/22/93 | FR | 8 |
| **HM-166X** | **Misc. Amdts.** | | | |
| | Project initiated | 5/90 | | |
| | | 08/07/91 | NPRM | 15 |
| | | 09/27/93 | FR | 26 |
| **HM-181** | **Performance-Oriented Packagings** | | | |
| | Project initiated | 10/80 | | |
| | | 04/15/82 | ANPRM | 18 |
| | Correct-Ind. Mtg. | 06/15/82 | ANPRM | |
| | Extend-Comm. | 09/16/82 | ANPRM | |
| | | 05/05/87 | NPRM | 61 |
| | Correct-Ext. Comm. | 09/08/87 | NPRM | |
| | Correct-Supp. Prop. | 11/06/87 | NPRM | |
| | Extend-Comm. | 04/14/88 | NPRM | |
| | Supp. Toxic Gases | 11/14/88 | NPRM | |
| | Supp. Anhy. Amm. | 07/26/89 | NPRM | |
| | Reopen Comm. Period | 11/24/89 | NPRM | |
| | Consolidated FR (HM-181A,B,C,D,204) | 12/21/90 | FR | 43 |
| | Transition Ext. | 09/18/91 | FR | |
| | Infectious Sub Ext | 10/01/91 | FR | |
| | Corr./resp. to Pet | 12/20/91 | FR | |
| | Corrections - Misc. | 10/01/92 | FR | |
| | Corr. - Inf. Sub. | 10/01/92 | FR | |
| | Corr. - Inf. Sub. | 10/16/92 | FR | |
| | Corrections | 12/15/92 | FR | |
| | Extend. - Inf. Sub. | 03/03/93 | FR | 27 |

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|---|---|---|---|---|
| **HM-181F** | **Performance-Oriented Packagings** | | | |
| | Project initiated | 1/92 | | |
| | | 07/12/93 | NPRM | 18 |
| | | 09/24/93 | FR | 2 |
| **HM-183/ 183A** | **Requirements for Cargo Tanks** | | | |
| | Project Initiated | 1/81 | | |
| | Design/Maint./Test for MC-306 Cargo Tanks | 06/28/82 | ANPRM | |
| | | 09/17/85 | NPRM | 39 |
| | Corrections | 12/05/85 | NPRM | |
| | Corr/Ext. Comments | 01/23/86 | NPRM | |
| | Not. Pub. Hearing | 02/18/86 | NPRM | |
| | Not. of Meetings | 03/04/87 | NPRM | |
| | | 06/12/89 | FR | 45 |
| | Corrections | 07/07/89 | FR | |
| | Delay, Not. of Meet | 09/15/89 | FR | |
| | Ext. of Eff. Date | 12/06/89 | FR | |
| | Ext./Pet. Response | 05/22/90 | FR | |
| | Resp. to Petitions | 09/07/90 | FR | |
| | Correction | 06/17/91 | FR | |
| | Delay Compl. Date | 01/06/92 | FR | |
| | Extend Compl. Date | 03/08/93 | FR | 45 |
| **HM-184F** | **Implementation of ICAO** | | | |
| | Project initiated | 10/89 | | |
| | | 01/16/92 | NPRM | 28 |
| | | 09/27/93 | FR | 21 |
| **HM-189J** | **Misc. Amdts.** | | | |
| | Project initiated | 2/92 | | |
| | | 10/01/93 | FR | 20 |
| **HM-198A** | **Elevated Temperature Materials** | | | |
| | Project initiated | 9/88 | | |
| | | 09/21/89 | NPRM | 12 |
| | Comment Extension | 11/15/89 | NPRM | |
| | | 10/02/91 | FR | 28 |
| | Delay Compl. Date | 12/31/91 | FR | |
| | Resp. to Petitions | 01/08/93 | FR | 15 |
| **HM-207A** | **Preemption Standards & Process Revisions** | | | |
| | Project initiated | 11/90 | | |
| | | 08/01/91 | NPRM | 9 |
| | | 05/13/92 | FR | 9 |

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|---|---|---|---|---|
| **HM-208** | **Registration of Shippers & Carriers** | | | |
| | Project initiated | 11/90 | | |
| | | 10/10/91 | NPRM | 11 |
| | | 11/07/91 | NPRM | |
| | | 07/09/92 | FR | 8 |
| | Clarification | 07/28/92 | FR | |
| | Resp. to Petitions | 08/21/92 | FR | |
| | Tech. Revision | 03/05/93 | FR | 8 |
| **HM-209** | **Public Sector Training & Planning Grants** | | | |
| | Project initiated | 11/90 | | |
| | | 03/02/92 | NPRM | 16 |
| | | 09/17/92 | FR | 6 |
| **HM-211** | **Marine Pollutants** | | | |
| | Project initiated | 9/91 | | |
| | | 01/31/92 | NPRM | 4 |
| | Comment Extension | 02/27/92 | | |
| | | 11/05/92 | FR | 10 |
| | Correction | 11/16/92 | FR | 1 |
| **HM-214** | **Oil: Spill Containment & Response Plans** | | | |
| | Project initiated | 8/92 | | |
| | | 02/02/93 | FR | 6 |
| | Comment extension | 04/20/93 | | 2 |
| | Revised Final | 06/16/93 | I-FR | 2 |
| **HM-215** | **IMO/ICAO Incorporation by Reference** | | | |
| | Project initiated | 6/92 | | |
| | | 12/22/92 | FR | 6 |

## HAZARDOUS MATERIALS RULEMAKING ACTIONS
## FINAL RULES CY '92 TO 4/15/94

| HM DOCKET | ANPRM MONTHS TO COMPLETE | NPRM MONTHS TO COMPLETE | FINAL RULE MONTHS TO COMPLETE | POST FINAL RULE MONTHS TO COMPLETE |
|---|---|---|---|---|
| HM-126F | | 12 | 34 | 8 |
| HM-166X | | 15 | 26 | |
| HM-181 | 18 | 61 | 43 | 27 |
| HM-181F | | 18 | 2 | |
| HM-183 | 18 | 39 | 45 | 45 |
| HM-184F | | 28 | 21 | |
| HM-189J | | | 20 | |
| HM-198A | | 12 | 28 | 15 |
| HM-207A | | 9 | 9 | |
| HM-208 | | 11 | 8 | 8 |
| HM-209 | | 16 | 6 | |
| HM-211 | | 4 | 10 | 1 |
| HM-214/ PC-1 | | | 6 | 4 |
| HM-215 | | | 6 | |

| PS Docket Number | Rulemaking Description | Date Federal Register | Status | Time To Complete |
|---|---|---|---|---|
| **PS-100** | **Gas detection in compressor bldgs.** | | | |
| | Project initiated | 10/1/87 | | |
| | | 04/04/88 | ANPRM | 7 |
| | | 07/27/90 | NPRM | 27 |
| | | 09/16/93 | FR | 38 |
| **PS-113** | **O & M Plans** | | | |
| | Project initiated | 03/15/89 | | |
| | | 11/06/89 | NPRM | 8 |
| | | 02/11/94 | FR | 51 |
| **PS-119** | **Allocation Formula** | | | |
| | Project initiated | 07/01/90 | | |
| | | 02/25/91 | ANPRM | 7 |
| | | 03/04/92 | NPRM | 12 |

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|---|---|---|---|---|
| | | 02/23/93 | FR | 12 |
| **PS-120** | **Buried offshore Pipelines** | | | |
| | Project initiated | 01/01/91 | | |
| | | 04/22/91 | NPRM | 4 |
| | | 12/05/91 | FR | 7 |
| **PS-123** | **Leakage Surveys** | | | |
| | Project initiated | 03/15/91 | | |
| | | 10/23/91 | NPRM | 7 |
| | | 10/22/93 | FR | 24 |
| **PS-126** | **Passage of instrumented internal inspection devices** | | | |
| | Project initiated | 01/01/92 | | |
| | | 11/20/92 | NPRM | 11 |
| | | 04/12/94 | FR | 16 |
| **PS-128** | **Alcohol misuse prevention program** | | | |
| | Project initiated | 01/15/92 | | |
| | | 12/15/92 | NPRM | 11 |
| | | 02/15/94 | FR | 14 |
| **PS-129** | **Drug data collection and reporting** | | | |
| | Project Initiated | 05/15/92 | | |
| | | 12/15/92 | NPRM | 6 |
| | | 12/23/93 | FR | 12 |
| **PS-130** | **Interim oil spill response plans** | | | |
| | Project initiated | 08/01/92 | | |
| | | 01/05/93 | FR | 5 |
| **PS-131** | **Update referenced Standards** | | | |
| | Project initiated | 06/15/92 | | |
| | | 03/18/93 | FR | 9 |

## PIPELINE SAFETY RULEMAKING ACTIONS
## FINAL RULES CY '92 TO 4/15/94

| PS DOCKET | ANPRM MONTHS TO COMPLETE | NPRM MONTHS TO COMPLETE | FINAL RULE MONTHS TO COMPLETE |
|---|---|---|---|
| PS-100 | 7 | 27 | 38 |
| PS-113 | - | 8 | 51 |
| PS-119 | 7 | 12 | 12 |
| PS-120 | - | 4 | 7 |
| PS-123 | - | 7 | 24 |
| PS-126 | - | 11 | 16 |
| PS-128 | - | 11 | 14 |
| PS-129 | - | 6 | 12 |
| PS-130 | - | - | 6 |
| PS-131 | - | - | 9 |

### HAZMAT—NUMBER OF INCIDENTS

Mr. COLEMAN. Please provide data by mode on the number of hazardous materials incidents and the number of deaths, injuries and property damage caused by those incidents in each of the years 1983 through 1993.

[The information follows:]

## HAZARDOUS IALS INCIDENTS
## (BY AND MODE)

### INCIDENTS BY MODE AND INCIDENT YEAR

| MODE | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AIR | 66 | 102 | 114 | 120 | 163 | 172 | 188 | 297 | 299 | 420 | 625 | 2566 |
| HIGHWAY | 4869 | 4507 | 4752 | 4616 | 4953 | 4906 | 6037 | 7302 | 7644 | 7796 | 10997 | 68379 |
| RAILWAY | 867 | 996 | 842 | 853 | 887 | 1018 | 1193 | 1279 | 1155 | 1129 | 1106 | 11325 |
| WATER | 12 | 8 | 7 | 7 | 15 | 15 | 11 | 7 | 12 | 6 | 3 | 103 |
| FREIGHT FORWARDER | 1 | 145 | 298 | 150 | 118 | 78 | 127 | 0 | 0 | 0 | 0 | 917 |
| OTHER | 0 | 6 | 6 | 12 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 28 |
| TOTALS | 5815 | 5764 | 6019 | 5758 | 6137 | 6190 | 7558 | 8885 | 9110 | 9351 | 12731 | 83318 |

### DEATHS BY MODE AND INCIDENT YEAR

| MODE | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AIR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HIGHWAY | 8 | 6 | 8 | 16 | 10 | 19 | 8 | 8 | 10 | 15 | 15 | 123 |
| RAILWAY | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| WATER | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| FREIGHT FORWARDER | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTALS | 8 | 7 | 8 | 17 | 10 | 19 | 8 | 8 | 10 | 15 | 15 | 125 |

### INJURIES BY MODE AND INCIDENT YEAR

| MODE | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AIR | 3 | 15 | 4 | 12 | 26 | 6 | 54 | 39 | 31 | 27 | 51 | 268 |
| HIGHWAY | 118 | 147 | 195 | 229 | 247 | 129 | 218 | 313 | 333 | 473 | 509 | 2911 |
| RAILWAY | 68 | 76 | 53 | 59 | 25 | 36 | 36 | 73 | 75 | 116 | 65 | 682 |
| WATER | 0 | 18 | 0 | 2 | 8 | 0 | 7 | 0 | 0 | 0 | 0 | 35 |
| FREIGHT FORWARDER | 0 | 3 | 1 | 12 | 25 | 0 | 15 | 0 | 0 | 0 | 0 | 56 |
| OTHER | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| TOTALS | 189 | 259 | 253 | 316 | 331 | 171 | 330 | 425 | 439 | 616 | 625 | 3954 |

### DAMAGES BY MODE AND INCIDENT YEAR

| MODE | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AIR | 52525 | 770956 | 12299 | 62813 | 13779 | 562176 | 104936 | 142038 | 77090 | 99529 | 88555 | 1986696 |
| HIGHWAY | 9158580 | 11118351 | 12689517 | 13106729 | 15528734 | 18475190 | 15233111 | 20240383 | 29649627 | 23991802 | 19746706 | 188938730 |
| RAILWAY | 2559130 | 3353339 | 10273646 | 3075523 | 7716725 | 2180697 | 10632203 | 11951572 | 8469499 | 7349302 | 2646111 | 70207747 |
| WATER | 76088 | 509029 | 3242 | 53500 | 54930 | 49262 | 39900 | 69898 | 154395 | 18175 | 25166 | 1053585 |
| FREIGHT FORWARDER | 300 | 14011 | 13918 | 102117 | 51126 | 15009 | 37655 | 0 | 0 | 0 | 0 | 234136 |
| OTHER | 0 | 975 | 515 | 3385 | 50 | 2700 | 2600 | 0 | 0 | 0 | 0 | 10225 |
| TOTALS | 11846623 | 15766661 | 22993137 | 16404067 | 23365344 | 21285034 | 26050405 | 32403891 | 38350611 | 31458808 | 22506538 | 262431119 |

NOTE: SOME PREVIOUS YEARS' FIGURES MAY HAVE BEEN UPDATED.

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## HAZMAT—PERFORMANCE INDICATORS

Mr. COLEMAN. In Congressional testimony on inter-modal transportation safety, the General Accounting Office testified that the Department of Transportation has made limited progress in developing performance indicators for transportation safety. What specific program goals and outcome measures has RSPA established in the areas of hazardous materials transportation?

[The information follows:]

RSPA's objective is to ensure the safe transportation of hazardous materials and oil. The Office of Hazardous Materials Safety (HMS) administers a comprehensive nationwide safety program to protect the Nation from the risks to life, health, property, and the environment inherent in the transportation of hazardous materials and oil by water, air, highway and railroad.

HMS has established the following performance goals:

Maintain historically small number of reported incidents that involve deaths and serious injuries,

Process 24,000 incident reports, 1,500 exemptions, 16,500 approvals, and 500 competent authorities,

Conduct 1,050 inspections, process 175 civil cases, close 150 cases, collect $700,000 penalties,

Inspect 200 manufacturers, 200 retesters, 50 reconditioners, 250 shippers, 250 shipment observations, and 50 non-vessel operating common carriers,

Reduce inspection and enforcement report preparation time from inspection to notice of probable violation by 4 months,

Train 6,500 state and local government personnel,

Update estimates of significant shipper volumes, highway and rail accident rates, and methods for analyzing hazardous materials transportation patterns,

Update revise, and publish 1995 emergency preparedness training curriculum based on state grantee feedback, and

Evaluate grantee performance prior to award of third round of grants.

RSPA believes its objectives are being met. The hazardous materials transportation safety record is excellent. While there have been significant increases in volumes shipped, fatality and injury levels have remained constant from 1980 through 1992, averaging 13 deaths and 361 serious injuries annually.

## INVESTMENT/HAZMAT FUNDING

Mr. COLEMAN. The GAO also indicated that the Department of Transportation does not always know the total federal, state and local investments in transportation safety and that more complete data on the national investment in transportation safety can help to identify where additional resources devoted to travel safety are likely to yield the greatest payoff.

For example, in the area of hazardous materials safety, RSPA is just one of several modal administrations that regulate the transportation of hazardous materials. Do you have data on the sum total of the Department of Transportation's annual resource commitment to hazardous materials safety?

[The information follows:]

Approximately $37.6 million of the Department's total budget is directly related to hazardous materials transportation safety functions. These functions include: regulatory development, research and data analysis, inspection and enforcement activities, emergency preparedness grants that are specifically tied to hazardous materials transportation safety. RSPS's total resource commitment to hazardous materials transportation safety is currently $25.6 million—which includes $11.9 million for the emergency response grant program. The principal contribution by the modal administrations to hazardous materials transportation safety is in terms of their inspection and enforcement programs.

Mr. COLEMAN. What about state, local and private sector expenditures? To what extent do you track their hazardous materials safety transportation investments?

[The information follows:]

State and local government expenditures on hazardous materials transportation safety are largely related to emergency response activities and inspection and enforcement programs. Total expenditures for these programs are difficult to estimate because hazardous materials transportation safety functions at the state and local level are generally not dedicated. They often entail dual-mission, and in some cases multi-mission, public safety functions. For example, fire-fighters trained in responding to hazardous materials transportation accidents also respond to accidents involving fixed-site facilities that may or may not store hazardous materials. Likewise, hazardous materials inspection and enforcement activities of state and local governments are a subpart of an overall vehicle inspection and enforcement effort.

Private sector expenditures on hazardous materials transportation safety are even more difficult to estimate. Such estimates would entail resolving and reaching consensus on such issues as the extent to which industry would invest in hazardous materials transportation safety in the absence of government regulations, the extent to which private sector safety investments exceed the level required by such regulations, and the extent to which new technology and research and development efforts by the private sector directly or indirectly benefit hazardous materials transportation safety. For example, investments in IVHS technology can be expected to provide benefits for both hazardous materials and non-hazardous materials transportation. But these benefits can not be uniquely assigned to hazardous materials transportation safety. There is presently no consensus on how these expenditures should be defined and measured.

Mr. COLEMAN. What share of the total national investment in hazardous materials safety is represented by RSPA's annual $13 million allocation?

[The information follows:]

However the total national investment in hazardous materials transportation safety were to be defined or measured, RSPA's annual resource allocation would be a very small portion of that total. For example, the safety standards involved with the design, construction, operation and maintenance of the 400,000 trucks and 120,000 rail tank cars annually engaged in the shipment of placarded loads of hazardous materials represent a private sector investment in safety that is in the hundreds of millions of dollars.

## HMTUSA REAUTHORIZATION

Mr. COLEMAN. As you know, the 1990 Hazardous Materials Transportation Uniform Safety Act (HMTUSA) expired at the end of fiscal year 1993. What are the administration's plans for reauthorizing the hazardous materials transportation safety amendments? Are you seeking any major changes in the authorizing statute?

[The information follows:]

On July 19, 1993, Secretary Peña transmitted the Administration's reauthorization bill to Congress. The draft bill does not propose any major changes to the current law with the exception of a proposed amendment that would exclude foreign offerors of hazardous materials, including foreign governments, from the requirement to register and pay fees. The exemption would not apply to foreign carriers that operate in the United States.

On November 21, 1993, the House passed on amended H.R. 2178, the Hazardous Materials Transportation Act of 1993. H.R. 2178 contains provisions similar to those in the Administration's bill, including an exemption for foreign offerors from hazardous materials registration requirements. The Senate bill, S. 1640, also includes the Administration's proposals. On April 18, 1994, the Development transmitted a letter expressing its position on the provisions of each bill.

## SIGNIFICANT HAZMAT REGULATIONS

Mr. COLEMAN. Please identify the three most significant hazardous materials regulations that RSPA plans to finalize during fiscal year 1995 and indicate why they are important.

[The information follows:]

HM-200, Hazardous Materials in Intrastate Commerce. This rulemaking action follows a statutory mandate in the Hazardous Materials Transportation Uniform Safety Act of 1990 to regulate hazardous materials transportation in intrastate commerce. By extending the application of the Hazardous Materials Regulations to all intrastate transportation in commerce, RSPA is promoting nationally uniform requirements that should result in improved safety in the transportation of hazardous materials.

HM-206, Improvements to Hazardous Materials Identification Systems. In this rulemaking, RSPA is considering changes to hazard communication requirements of the Hazardous Materials Regulations, based on RSPA's initiative, comments received in response to an advance notice of proposed rulemaking, and recommendations of the National Academy of Sciences. This action will improve the current hazard communication system. Improved identification of hazardous materials in transportation will assist emergency response personnel in responding to and mitigating the effects of incidents and accidents involving hazardous materials.

HM-215A, Implementation of the UN Recommendations, International Maritime Dangerous Goods Code, and International Civil Aviation Organization's Technical Instructions. This rulemaking considers revisions to the HMR for increased harmonization with recommendations adopted by the United Nations Committee of Experts on the Transport of Dangerous Goods, and rules and regulations developed by IMO and ICAO. Increased harmonization of the HMR with international regulations should reduce confusion by the regulated community, thereby improving safety in transportation. In addition, harmonization of the domestic and international regulations should facilitate international commerce.

## HAZMAT—PRIORITY RULEMAKING DATA

Mr. COLEMAN. Please update the hazardous materials priority rulemaking data shown on pages 810–815 of last year's hearing record.

[The information follows:]

## RSPA PRIORITY RULEMAKINGS

| Rulemaking Project | Summary | Current Status |
|---|---|---|
| Hazardous Substances and Reportable Quantities (HM-145J) | To revise the appendix of Hazardous Substance and Reportable quantities to reflect changes in EPA's List. | DOT is required to regulate as hazardous materials, those hazardous substances regulated under CERCLA. Final rule is anticipated. |
| Miscellaneous amendments (HM-166Y) | To make miscellaneous revisions and corrections to the HMR that are not significant or controversial. | NPRM anticipated. |
| Miscellaneous amendments (HM-166Z) | To update references to matter incorporated by reference to the most recent editions of the reference and to make additional non-substantive changes. | Final rule anticipated. |
| Compatibility with IAEA Regulations for Radioactive Materials (HM-169A) | Proposes to update radioactive materials requirements based on current Safety Series #6 of the IAEA. | NPRM published 11/14/89. Final rule anticipated. |

| | | |
|---|---|---|
| Hazardous Materials in Intrastate Commerce (HM-200) | Proposes to extend the applicability of the HMR to the transportation of Hazardous Materials in wholly intrastate commerce. | ANPRM published 1987. NPRM published 7/9/93. More than 170 comments are under review. Final rule anticipated in 1995. |
| Detection of Tank Car Defects (HM-201) | Proposes to require railroad tank car owners and repair facilities to inspect tank car tanks for cracks after repairs. | ANPRM published 12/87. NPRM published 9/16/93. Final rule anticipated. |
| Tank Car Head Shield and Thermal Protection (HM-175A) | Proposes to require head shields and thermal protection on tank cars for inhalation toxic materials. | ANPRM published 5/15/90. Supplemental notice published 8/22/90. NPRM published 10/8/93. Public meeting held 1/6/94. Final rule anticipated. |
| Registration and Fee collection (HM-208A) | To extend requirement for foreign shippers to register and clarify shipper responsibility. | NPRM published 4/1/94. Final rule anticipated. |
| Improving Hazardous Materials Identification Systems (HM-206) | To determine methods of improving the current system of placarding vehicles transporting hazardous materials and improving other identification systems. | HMTUSA, Sec. 25(a) requires initiation of a rulemaking to evaluate methods of improving system of identifying hazardous materials and safeguard health and safety of emergency responders. ANPRM published 6/9/92. NPRM anticipated. |

| | | |
|---|---|---|
| Central Reporting System and Computerized Telecommunications Data Center | To evaluate the feasibility, necessity, and safety benefits for establishing a central reporting center and computerized telecommunication data center to receive, store, and retrieve data concerning shipments of hazardous materials being transported by all modes. | HMTUSA, Sec.25(a), requires completion of rulemaking by 6/16/92. Addressed in HM-206 ANPRM published 6/9/92. (See information under HM-206.) |
| Safeguarding Food from Contamination During Transportation (FS-1) | Requests comments concerning options relative to regulations to ensure that food and other consumer products are not made unsafe as a result of certain transportation practices. | ANPRM published 2/20/91. Numerous meeting held with other agencies. More than 110 comments received. NPRM published 5/21/93. Further action undetermined. |
| Oil: Spill Containment and Response Plans (HM-214/PC-1) | To implement requirements of the Federal Water Pollution Control Act f 1990. Amends the HMR to implement minimum standards for the safe transportation of oil not previously regulated and require the preparation of response plans for preventing and responding to the discharge of oil. | Interim final rule published 2/5/93. Extension of comment period and announcement of public hearings published 4/20/93. Public hearing held 5/13/93. Revised Interim Final Rule published 6/16/93. Requirements became effective 10/1/93. |

| | | |
|---|---|---|
| Tank Cars and Cargo Tank Motor Vehicles: Attendance Requirements (HM-212) | To allow the use of signalling systems (sensors, alarms, electronic surveillance equipment) to satisfy the attendance requirements unloading tanks cars and for loading cargo tank motor vehicles. | NPRM published 9/14/92. Final rule anticipated. |
| Infectious Substance Requirements (HM-181G) | To consider revisions to the infectious substance provisions of the HMR. | ANPRM published 3/3/93. Public hearing held 3/17/93. Extension of compliance date published 12/20/93. NPRM and final rule anticipated. |
| Cargo Tanks: Miscellaneous Requirements (HM-183C) | To amend certain requirements on the manufacture, qualification, and maintenance of cargo tank motor vehicles. | NPRM published 3/3/93. Public meeting held 3/24-25/93. Comment period closed 6/15/93. Extension of manufacture date published 1/12/94. Public meeting held 2/7-8/94. Final rule anticipated. |
| Intermediate Bulk Containers (HM-181E) | To revise the HMR to incorporate manufacture and use provisions for intermediate bulk containers. | NPRM published 8/14/92. Final rule anticipated. |
| Containers on flatcar (HM-197) | To adopt safety standards for transporting bulk packages in TOFC/COFC service and eliminated the need for FRA approval. | ANPRM published 4/85. NPRM published 5/7/93. Final rule anticipated. |

| | | |
|---|---|---|
| Incorporation of Recent UN Recommendations. (HM-215A) | To revise the HMR by incorporating changes based on the most recent changes to the UN Recommendations, ICAO, and IMO requirements. | NPRM and final rule anticipated. |

## HAZMAT—INCREASE IN REPORTED INCIDENTS

Mr. COLEMAN. Since 1986, the number of hazardous materials incidents has been increasing. In 1992, 61 percent more incidents were recorded (9,300) than in 1986 (5,758). Is this trend a function of deteriorating safety or a greater awareness within the affected industries of hazardous incident reporting requirements?

[The information follows:]

The increase in the number of incidents recorded from 1986 to 1992 results from a combination of many factors. These factors include greater awareness among those responsible for submitting incident reports, outreach and communications efforts on the part of both the government and private industry, as well as an exponential growth in the small package delivery industry. Also contributing to this increase has been an expansion of incident reporting criteria and the extension of the hazardous materials table to include additional materials.

Specific changes to the hazardous materials program that may have generated an increase in reports include the implementation of a revised incident report form in 1990, the adoption of a training requirement for hazardous materials handlers, the ongoing Cooperative Hazardous Materials Enforcement Development program, and the implementation of the hazardous materials registration program in 1992.

Although the annual number of incident reports has increased in recent years, viewing this larger aggregate number as an indication of deteriorating safety would be misleading. An example of an increase in total incidents not necessarily representing a compromise in safety can be found in the 36% increase in incidents from 9,351 in 1992 to 12,731 in 1993. This rise in incidents is due almost entirely to small package spills reported by major parcel delivery carriers. When the total number of 1993 incidents is examined for serious incidents, defined by RSPA as incidents involving a fatality, a major injury, an evacuation of the general public, or an accident/train derailment, a slight decrease occurred from 395 in 1992 to 391 in 1993. As this slight drop in serious incidents demonstrates, an increase in the total number of reported incidents does not translate into a trend of deteriorating safety nor does it represent a compromise in the safe transportation of hazardous materials.

## HAZMAT FINAL RULE—INTRASTATE CARRIERS

Mr. COLEMAN. RSPA has issued a notice of proposed rulemaking to extend hazardous materials regulations to intrastate carriers. When do you anticipate publishing a final rule?

[The information follows:]

The comment period for the notice of proposed rulemaking to extend the hazardous materials regulations to the intrastate transportation of hazardous materials closed on October 13, 1993. RSPA is presently reviewing the approximately 175 comments in order to determine future rulemaking action.

Mr. COLEMAN. Since the notice of proposed rulemaking would give intrastate shippers and carriers one year to comply with the regulations following publication of the final rule, intrastate reporting requirements would not become effective until April 1995, at the earliest. If that is accurate, why do you project a doubling of hazardous materials incidents reports from 12,000 in 1993 to 24,000 in 1994?

[The information follows:]

The rulemaking proposes a phased implementation period of one year, following publication of the final rules, applicable to the intrastate transportation of hazardous materials (other than bulk packaging requirements). However, RSPA encourages voluntary compliance with new rules and regulations immediately upon their publication in the Federal Register. Considering that the incident reporting requirement is easily understood and relatively easy to comply with, RSPA anticipates that it will begin to receive these reports well in advance of the mandatory compliance date.

## HAZMAT—NRC COSTS

Mr. COLEMAN. RSPA is projecting a 48 percent increase in the costs related to services provided through the National Response Center (NRC). How did you determine that $370,000 would be required in fiscal year 1995? On what basis does RSPA reimburse the Coast Guard for hazardous materials incident reports?

[The information follows:]

The $370,000 funding for fiscal year 1995 reflects services provided by both NRC and Volpe National Transportation Systems Center (VNTSC). RSPA reimburses the Coast Guard to maintain the NRC with appropriate full time staff to ensure 24 hours per day, 7 days per week operation. The cost of maintaining the NRC includes salaries, training, equipment and communications links. The VNTSC receives, validates, maintains, and distributes telephonic data collected by the NRC, and provides reports based on these data.

## HAZMAT ENFORCEMENT OF INTRASTATE INCIDENTS

Mr. COLEMAN. What will be RSPA's enforcement responsibilities for intrastate incidents and what is your intrastate hazardous materials enforcement strategy across modes within the Department?

[The information follows:]

RSPA does not expect any significant changes to its enforcement program with the extension of the Hazardous Materials Regulations (HMR) to include intrastate highway carriers. Only highway transportation will be affected, since all intrastate transportation in the other modes is already subject to the HMR. Intrastate motor carriers will be inspected by the Federal Highway Administration's Office of Motor Carriers. It is possible that some new shippers, for which RSPA shares concurrent jurisdiction with the DOT modal administrations, could be added, but RSPA believes that nearly all shippers are currently offering hazardous materials for transportation by interstate carriers.

Mr. COLEMAN. What responsibilities will the states have regarding intrastate incidents?

[The information follows:]

In the past, RSPA has encouraged states to adopt, and enforce, the Hazardous Material Regulations (HMR) through the Cooperative Hazardous Materials Enforcement Development (COHMED) program. If the HMR is extended to all intrastate transportation of hazardous materials, RSPA will continue to work with the states, through such programs as COHMED, to ensure that there is a consistent approach to state and federal enforcement of the HMR.

## HAZMAT APPROVALS PROCESSED

Mr. COLEMAN. During RSPA's fiscal year 1994 budget hearings, workload data provided showed estimated "approvals processed" figures for fiscal years 1992 and 1993 at 21,000 and 34,000, respectively. Your fiscal year 1995 budget submission shows approvals processed for the same years as 8,223 and 11,000, respectively. Please explain what "approvals processed" means and explain the significant difference between the estimated and reported figures.

[The information follows:]

An approval is an authorization which permits persons to ship certain materials or to perform inspections and/or testing activities after having demonstrated they have met the standards contained within the Hazardous Materials Regulations. In the fiscal year 1994 budget submission, RSPA reported the actual number of approvals in fiscal year 1992 (8,223) and an estimated number for fiscal year 1993 (11,000). The FY 1993 projection was based on the assumption that a large number of requests to reclassify explosives would be received as a result of new United Nations Recommendations; however fewer requests were received than projected and, as a consequence, the actual number of approvals was lower than projected.

### HAZMAT—COMPETENT AUTHORITIES

Mr. COLEMAN. In addition, please explain what "competent authorities" means and why the figures for that line item were estimated in the fiscal year 1994 budget justifications at 800 and 900 for fiscal years 1992 and 1993, respectively, and was reported at 250 and 300 for those fiscal years in your current budget submission. That is an estimated difference of nearly 70 percent for both of those years.

[The information follows:]

A competent authority approval or certification is a document issued by an appropriate government authority which specifies the manner in which a hazardous material must be offered for international transportation. Under the regulations of the International Maritime Organization, International Civil Aviation Organization and the International Atomic Energy Agency, competent authority approvals and certifications must be issued by the country of origin of the hazardous materials shipment.

In the fiscal year 1994 budget, RSPA estimated it would issue 800 competent authorities in fiscal years 1992 and 900 in fiscal 1993. Subsequent to that estimate, RSPA reduced the paperwork burden on United States shippers by requiring a single document for explosive shipments, whether shipped domestically or internationally instead of two documents, and RSPA began to report international explosive shipments as explosive classification approvals rather than both competent authority approvals and explosive classification approvals. Had RSPA not changed the paperwork process, the number of competent approvals estimated in fiscal years 1992 and 1993 would have been accurate.

Because it was decided to reduce the paperwork burden on U.S. shippers by reformatting the explosives classification approvals to meet the international regulations, the end result was a single document for explosives shipment, whether domestically or internationally. Thus, the competent authority approvals issued on explosives classification approvals rather than competent authority approvals which accounts for the decreased numbers from the estimates.

### HAZMAT WORKLOAD

Mr. COLEMAN. You estimated last year, during the fiscal year 1994 budget hearings, that you would conduct over 1,500 safety inspections of hazardous materials shipments, initiate 225 civil cases, close 175 cases and assess over $910,000 in penalties for violations of hazardous materials regulations. Your 1995 budget justifications show that you may fall short of those anticipated goals. Would you please explain why?

[The information follows:]

RSPA estimated, in its fiscal year 1994 budget submission to Congress, that it would conduct 1,600 inspections, initiate 250 civil penalty cases, close 225 cases, and collect $900,000 in penalties. RSPA provided these estimated numbers based on staffing at the time of submission, projected staffing for fiscal year 1994, and projections of enforcement activity based on that staffing. RSPA experienced unexpected inspector down-time in fiscal year 1993 and turnover in FY 1994 which led to fewer inspections than projected. Nevertheless, RSPA could achieve the initiated cases figure of 250.

### HAZMAT TRAINING—PRIVATE SECTOR

Mr. COLEMAN. As you know, hazardous materials regulations required that, as of October 1, 1993, hazardous materials employers should have completed the initial training of their employees. What has been done to ensure employer compliance with these training requirements?

[The information follows:]

Review of training records and documentation has been incorporated into the compliance review programs of RSPA and the modal administration.

Mr. COLEMAN. Do you have any figures on the total number of employees trained and not trained to date?

[The information follows:]

RSPA does not have figures on the total number of employees trained and not trained to date.

## HAZMAT RETESTER INSPECTIONS

Mr. COLEMAN. Please supply for the record data on the number of retester inspections conducted in fiscal year 1992 and fiscal year 1993 and the planned number for fiscal years 1994 and 1995.

[The information follows:]

In fiscal year 1992 and 1993, RSPA conducted 218 and 130 retester inspections, respectively. We plan to conduct 150 inspections in both fiscal years 1994 and 1995.

## HAZMAT INSPECTOR STAFF

Mr. COLEMAN. Please provide a chart showing by federal region (including city and state) your current numbers of authorized hazardous materials inspector positions and on-board strength, similar to the data on page 817 of last year's hearing record.

[The information follows:]

| | Authorized | On board |
|---|---|---|
| Headquarters (Washington, DC) | 7 | 7 |
| Eastern Region (Newark, NJ) | 4 | 4 |
| Central Region (Des Plaines, IL) | 4 | 4 |
| Western Region (Ontario, CA) | 4 | 2 |
| Southwest Region (Houston, TX) | 3 | 2 |
| Totals | 22 | 19 |

## HAZMAT FIELD OFFICES

Mr. COLEMAN. RSPA's recent report on the implementation of a risk-based inspection system for the hazardous materials program indicates that RSPA is assessing the costs and benefits of the addition of two regional offices in Atlanta and Houston. Last year, a fourth regional office was established in Houston, and RSPA indicated that there were no plans to establish a fifth regional office. Please update the subcommittee on RSPA's plans to establish additional field offices.

[The information follows:]

RSPA believes that it might achieve cost efficiencies and greater inspection coverage by establishing a regional office in the Southeast, an area presently covered by the Eastern Region office located in Newark, New Jersey. However, RSPA has no plans at this time to request authorization to establish that office.

Mr. COLEMAN. Does RSPA have any plans to reorganize or consolidate existing field offices?

[The information follows:]

No.

### HAZMAT—COST OF INSPECTION TRIPS

Mr. COLEMAN. Please provide data on the average cost per inspection trip in each of fiscal years 1991 through 1993 and estimated for fiscal years 1993 and 1994.

[The information follows:]

RSPA's standard inspection trip lasts five days. In fiscal year 1991, the average cost per inspection trip was $903. In fiscal year 1992, the average cost was $761. In fiscal year 1993, the average cost was $733. RSPA estimates that the average cost for fiscal year 1994 will be about the same as 1993.

### HAZMAT—TIME SPENT ON ENFORCEMENT

Mr. COLEMAN. For each of the last two fiscal years, please specify the average time that was spent processing enforcement cases by regional staff before these cases were submitted to headquarters, the time spent reviewing these cases at headquarters, and the time lapsed when these cases were first submitted to the Office of Chief Counsel and when they were settled.

[The information follows:]

For enforcement cases initiated in 1992, inspectors processed cases in 159 days; headquarters review and referral to the Office of the Chief Counsel (OCC) took 57 days; and OCC took 105 days to issue NOPVs. The average total time was 10.6 months. For enforcement cases initiated in 1993, inspectors processed cases in 176 days; headquarters review and referral to OCC took 115 days; and OCC took 42 days to issue NOPVs. The average total time was 11 months.

Once a NOPV is issued, RSPA has much less control over the timing of actions. For 1992 cases closed to date, the time period between issuance of an NOPV and closing of the case was 283 days. For 1993 cases closed to date, that time period is 164 days.

In summary, inspection-to-case-closure time to date was 19.9 months for 1992 cases and 16.3 months for 1993 cases. The 1992 case time is longer than was reported last year because more 1992 cases have closed since RSPA responded to last year's question, thus increasing the overall time for the year. This is going to occur nearly every year; the 16.3-figure for 1993 cases likely will be higher next year.

Based on processing standards instituted during 1993, the current 1994 numbers for the inspection-to-NOPV period show a significant improvement. Thus far for 1994, inspector processing time is 105 days; review and referral time is 73 days; and OCC NOPV issuance time is 33 days, for a total time of 6.9 months. This represents a reduction of over four months from 1993's inspection-to-NOPV time.

### HAZMAT—WORKLOAD MEASURES

Mr. COLEMAN. Please provide some workload measures for the Office of Hazardous Materials Transportation for fiscal years 1992 and 1993 and estimated for 1994 and 1995. This should include but not be limited to data on civil penalties and inspections.

[The information follows:]

WORKLOAD INDICATORS

| | 1992 | 1993 | 1994 est. | 1995 est. |
|---|---|---|---|---|
| Inspector Work Years | 17.5 | 17.0 | 18.6 | 22.0 |
| Inspections | 1,203 | 933 | 1,300 | 1,500 |
| Civil Cases | 133 | 245 | 275 | 300 |
| Cases Closed | 72 | 156 | 200 | 255 |
| Penalty Assessments | $300,248 | $679,675 | $800,000 | $900,000 |

### HAZMAT INTERMODAL DATABASE

Mr. COLEMAN. Last year, RSPA indicated that the unified shippers' inspection and enforcement data base would be operational by the end of fiscal year 1994. Please provide an update on the status of your efforts to develop this intermodal database.

[The information follows:]

RSPA, under the leadership of its Office of Hazardous Materials Safety, completed the development of a Unified Shippers' Inspection and Enforcement Data System (UNISHIP) in fiscal year 1993. This system includes intermodal data on inspection and enforcement activities related to hazardous materials shippers. A menu access program was developed and the system was demonstrated to prospective modal users during the 4th Quarter of fiscal year 1993. The system is now fully operational with planned semiannual updates.

### INCREASED REGISTRATION PROGRAM COSTS

Mr. COLEMAN. Why is a 5 percent increase in the administration costs of the hazardous materials registration program needed for fiscal year 1995?

[The information follows:]

RSPA is requesting a five percent increase in the administration costs of the hazardous materials registration program to cover anticipated increases in the costs of data entry services, and to provide additional programming and processing services that will be required by anticipated revisions to the program. One such revision is a cooperative program with state hazardous materials regulatory agencies for the collection of federal registrations through the state agencies. A trial program of this nature will be conducted during the 1994–95 registration year by the Public Utility Commission of Ohio. RSPA is also considering various means of increasing the funds collected through this program, which will also require revisions to the automated data system and increased customer service support.

### HAZMAT COMPLIANCE RATES

Mr. COLEMAN. What compliance rates were achieved in the 1992–1993 registration cycle, estimated for the 1993–1994 registration cycle and projected for the 1994–1995 registration cycle for the hazardous materials registration program?

[The information follows:]

At the beginning of the registration program, we did not have an accurate picture of the universe of programs subject to the mandatory registration provisions of the HMTA. Over 100 thousand shipper/carriers were originally estimated to be covered by the registration requirements. At that level, there was an approximate 20–25 percent compliance attained during the first registration cycle.

We also know that several large groups covered by the original legislation did not bother to register and were requesting exemption from the registration requirements. These groups included farmers, home fuel-oil delivery companies, and small-waste generators. Subsequent technical amendments to the HMTA exempted these potential shipper/carriers. With these exemptions, the universe of potential registrants was reduced from the original estimate to approximately 30 thousand shipper/carriers. We have been successful in registering over 25 thousand shipper/carriers in each of the last 2 registration cycles. This represents most of the shipper/carriers who would have registered. We estimate for the upcoming registration period, beginning in July, 1994, that we will identify more shipper/carriers in the target groups who have not yet registered. With continued outreach and enforcement efforts, coupled with the comparatively heavy penalties associated with a failure to register, we will be successful in registering all shipper/carriers required to pay the user fee.

Mr. COLEMAN. How do compliance rates vary among the various types of hazardous materials shippers and carriers?

[The information follows:]

We believe that few, if any, of the major shippers and carriers of hazardous materials subject to the registration program have failed to do so. But the situation may be different with respect to those shippers and carriers who only engage in the transportation of hazardous materials on an occasional or infrequent basis.

## HAZMAT COLLECTIONS—FEE STRUCTURE

Mr. COLEMAN. What plans does RSPA have to review and revise the $250 registration fee and the $50 administration fee currently charged to hazardous materials shippers and carriers?

[The information follows:]

RSPA issued a notice of proposed rulemaking on April 1, 1994, to improve compliance with the current registration requirements. Later this year, we will consider various alternatives to ensure that the emergency response grant program is on a sound and equitable funding basis.

## EMERGENCY PLANNING AND TRAINING 1993 GRANTS BY STATES

Mr. COLEMAN. Please provide a table showing the states that received emergency planning and training grants in fiscal year 1993 and the amounts received.

[The information follows:]

Answer:

| STATE | FY 93 |
|---|---|
| ALABAMA | $165,178 |
| ALASKA | 57,817 |
| AMERICAN SAMOA | 46,082 |
| ARIZONA | 114,762 |
| ARKANSAS | 102,705 |
| CALIFORNIA | 680,808 |
| COLORADO | 116,717 |
| CONNECTICUT | 105,035 |
| DELAWARE | 63,489 |
| DIST. OF COL. | 52,412 |
| FLORIDA | 303,364 |
| GEORGIA | 200,362 |
| HAWAII | 62,885 |
| IDAHO | 82,499 |
| ILLINOIS | 443,629 |
| INDIANA | 213,365 |
| IOWA | 146,993 |
| KANSAS | 163,978 |
| KENTUCKY | 126,612 |
| LOUISIANA | 145,494 |
| MARYLAND | 132,198 |
| MASSACHUSETTS | 152,265 |
| MICHIGAN | 236,977 |
| MINNESOTA | 182,067 |
| MISSISSIPPI | 124,356 |
| MISSOURI | 189,255 |
| MONTANA | 82,722 |
| NEBRASKA | 129,437 |
| NEVADA | 82,352 |
| NEW YORK | 353,716 |
| NEW HAMPSHIRE | 73,103 |
| NEW JERSEY | 218,169 |
| NO. MARIANAS | 45,896 |
| NORTH DAKOTA | 97,958 |
| NORTH CAROLINA | 212,427 |
| OHIO | 370,313 |
| OKLAHOMA | 132,667 |
| OREGON | 129,034 |
| PENNSYLVANIA | 294,557 |
| RHODE ISLAND | 65,082 |
| SOUTH CAROLINA | 128,781 |
| SOUTH DAKOTA | 86,606 |
| TENNESSEE | 172,522 |
| TEXAS | 451,402 |
| UTAH | 98,429 |
| VERMONT | 58,878 |
| VIRGIN ISLANDS | 46,696 |
| VIRGINIA | 169,967 |
| WASHINGTON | 138,937 |
| WISCONSIN | 182,343 |
| WYOMING | 70,207 |
| SUBTOTAL | 8,303,505 |
| INDIAN TRIBES | 88,012 |
| TOTAL | $8,391,517 |

## EMERGENCY PLANNING AND TRAINING 1994 GRANTS BY STATES

Mr. COLEMAN. Also, please supply a table showing the estimated state allocations for emergency planning and training grants in fiscal year 1994.

[The information follows:]

| STATE | TOTAL FY 94 |
|---|---|
| California | $738,179 |
| Texas | 489,441 |
| Illinois | 481,013 |
| Ohio | 401,519 |
| New York | 383,524 |
| Florida | 328,928 |
| Pennsylvania | 319,379 |
| Michigan | 256,947 |
| New Jersey | 236,554 |
| Indiana | 231,345 |
| North Carolina | 230,328 |
| Georgia | 217,246 |
| Missouri | 205,203 |
| Wisconsin | 197,709 |
| Minnesota | 197,410 |
| Tennessee | 187,060 |
| Virginia | 184,290 |
| Alabama | 179,097 |
| Kansas | 177,796 |
| Massachusetts | 165,096 |
| Iowa | 159,380 |
| Louisiana | 157,755 |
| Washington | 150,645 |
| Oklahoma | 143,847 |
| Maryland | 143,338 |
| Nebraska | 140,345 |
| Oregon | 139,908 |
| South Carolina | 139,633 |
| Kentucky | 137,282 |
| Mississippi | 134,835 |
| Colorado | 126,553 |
| Arizona | 124,433 |
| Connecticut | 113,886 |
| New Mexico | 112,271 |
| Arkansas | 111,360 |
| West Virginia | 109,057 |
| Utah | 106,724 |
| North Dakota | 106,213 |
| Puerto Rico | 104,289 |
| South Dakota | 93,904 |
| Montana | 89,693 |
| Idaho | 89,451 |
| Nevada | 89,292 |
| Maine | 81,724 |
| New Hampshire | 79,263 |
| Wyoming | 76,123 |
| Rhode Island | 70,566 |
| Delaware | 68,839 |
| Hawaii | 68,184 |
| Vermont | 63,840 |
| Alaska | 62,689 |
| District of Columbia | 56,829 |
| Guam | 50,948 |
| Virgin Islands | 50,631 |
| American Samoa | 49,965 |
| Northern Marianas | 49,764 |
| SUBTOTAL | 9,461,527 |
| INDIAN TRIBES | 188,473 |
| TOTAL | $9,650,000 |

## METHODOLOGY FOR GRANT ALLOCATIONS

Mr. COLEMAN. Please describe the methodology used to determine the amounts of the state allocations under the emergency planning and training grant program.

[The information follows:]

RSPA allocated grant funds for fiscal year 1993 based on objective factors representing community risks and needs. Each factor was based on objective and verifiable publicly available data. With the exception of the states and territories that did not apply, each grantee received an award equal to its share based on RSPA's allocation factors.

RSPA used the following factors for allocation of training grants.

Half of the training grant funds are allocated to states (which include territories) based on their percentage of total population. Population is a surrogate for the number of responders needing training.

Three-tenths of funds are allocated to states based on their percentage of total highway miles, which is a surrogate for highway risk.

Two-tenths of funds are allocated to states on the basis of their percentage of the total number of chemical facilities, as reported by the U.S. Census Bureau. This allocation measure is a surrogate for fixed-facility risk.

A three percent set-aside for training grants was made for Indian tribes to ensure benefit to tribes.

For consistency, we used a similar approach in selecting the following factors for planning.

Two-tenths of the total funds are allocated to states based on their percentage of total population.

Four-tenths of funds are allocated based on the state's percentage of total hazardous materials truck miles, which is a surrogate for highway hazardous materials risk.

Four-tenths of funds are allocated on the basis of the state's percentage of the SuperFund Amendments and Reauthorization Act of 1986 §302 chemical facilities. This allocation measure is a surrogate for fixed-facility risk.

In determining these factors, we included only factors for which complete and verifiable data were available.

## HAZMAT TRAINING RESOURCES

Mr. COLEMAN. Please provide a complete listing of all resources in the fiscal year 1995 request related to hazardous materials training of state and local personnel and compare those levels to the corresponding funding levels for fiscal year 1994.

[The information follows:]

| | Fiscal year— | |
|---|---|---|
| | 1994 | 1995 |
| Grants | $9,650,000 | $10,350,000 |
| ERG | 200,000 | 0 |
| NIEHS | 250,000 | 0 |
| Monitoring and Technical Assistance | 400,000 | 400,000 |
| Curriculum Development | 400,000 | 400,000 |
| Total | 10,900,000 | 11,150,000 |

## HMIS FUNDING

Mr. COLEMAN. Please break down in detail the specific uses of funds appropriated for HMIS in fiscal year 1994.

[The information follows:]

[In thousands of dollars]

| *Activity* | *Expenditure* |
|---|---|
| Data entry and systems development efforts to maintain and update: | |
| Incident Reporting Subsystem | $476 |

| Activity | Expenditure |
|---|---|
| Exemptions Subsystem | 45 |
| Approvals Subsystem | 80 |
| Regulations Subsystem | 45 |
| Enforcement Subsystem | 65 |
| Technical Support (Office Automation) | 55 |
| Support the National Response Center | 200 |
| Update and maintain the Telephonics Subsystem | 30 |
| Facility Management and Computer System Support | 174 |
| Develop and Install an Imaging System (hardware, software & development, backfile conversion) | 365 |
| Communications Upgrade | 15 |

### HAZMAT—IDENTIFICATION SYSTEMS REPORT

Mr. COLEMAN. Please provide for the record a copy of your report to Congress, "Improvements to Hazardous Materials Identification Systems."

[The information follows:]

THE SECRETARY OF TRANSPORTATION
WASHINGTON, D.C. 20590

February 15, 1994

The Honorable Thomas S. Foley
Speaker of the House of Representatives
Washington, DC 20515

Dear Mr. Speaker:

Enclosed is the Department of Transportation's (DOT) report to Congress titled "Improvements to Hazardous Materials Identification Systems." This report is submitted in accordance with the requirements of Section 25 of the Hazardous Materials Transportation Uniform Safety Act of 1990 (the Act), Public Law 101-615. The report addresses recommendations made by the National Academy of Sciences (NAS) in its report submitted to Congress and the Department on April 29, 1993, and presents the results of DOT's rulemaking proceeding on improving the hazardous materials identification system.

The Department agrees with NAS that the national central reporting system described in the Act should not be implemented and recommends no further congressional action on such a system.

DOT has taken steps to improve the hazardous materials communication system including: (1) implementation of an emergency response grants program that provides funds to States and Indian tribes for emergency response planning and training; (2) issuance of training regulations that relate to training recommendations made in the NAS report; (3) issuance of communication standards that require display of a 24-hour telephone number on shipping papers, and the presence of emergency response information on transport vehicles for immediate use; and (4) initiation of the NAS concept, by the Federal Railroad Administration, of a limited rail startup (a demonstration program) of automated information systems.

DOT recognizes that the vast majority of hazardous materials incidents which require an emergency response occur on the highway. The Federal Highway Administration will explore additional technology applications which could improve hazard communication for emergency responders.

An identical letter has been sent to the President of the Senate.

Sincerely,

Federico Peña

Enclosure

# Report to the Congress on

# IMPROVEMENTS TO HAZARDOUS MATERIALS IDENTIFICATION SYSTEMS

January 1994

U.S. Department
of Transportation

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## Report to the Congress on

# IMPROVEMENTS TO HAZARDOUS MATERIALS IDENTIFICATION SYSTEMS

## EXECUTIVE SUMMARY

The Hazardous Materials Transportation Uniform Safety Act of 1990 (the Act), Pub. L. 101-615, required the U.S. Department of Transportation (DOT) to contract with the National Academy of Sciences (NAS) to conduct a study of the feasibility and necessity of establishing and operating a central reporting system and computerized telecommunications data center that would receive, store, and retrieve data on all daily shipments of hazardous materials by all modes. In addition, DOT was required to initiate a rulemaking proceeding to determine methods of establishing and operating a central reporting system and computerized data center described in the Act, and to determine methods of improving the current system of placarding vehicles transporting hazardous materials. DOT is to provide Congress a summary of the NAS report and the results of DOT's rulemaking proceeding. The Secretary of Transportation is to include his recommendations on implementation of the national central reporting system described in the Act.

This report summarizes NAS Special Report 239, "Hazardous Materials Shipment Information for Emergency Response," that was submitted to Congress and the Secretary of Transportation on April 29, 1993, and presents a summary of DOT's rulemaking proceeding under Docket HM-206, titled "Improvements to Hazardous Materials Identification Systems." This report presents the Secretary of Transportation's recommendations with respect to implementing the NAS recommendation concerning the national central reporting system and identifies DOT's actions related to seven additional NAS recommendations.

Highlights of this report are as follows:

- NAS found that, in most instances, the existing hazardous materials communication system works and the information sources available at the scene of a hazardous materials transportation incident meet the critical information needs of emergency responders. DOT finds that, while some improvements may be appropriate, the existing system provides a satisfactory level of safety when properly implemented in compliance with the existing regulations. NAS estimated that, in about 1 percent of the truck and less than one-half of 1 percent of the rail hazardous materials incidents projected to occur nationwide each year, there could have been both an "information problem" and a "consequential" outcome as defined in the report. NAS found that most of these problems were the result of a lack of knowledge by the response community and others, and can best be addressed by enhanced training and enforcement efforts. NAS also found that because some of the emergency responders it interviewed lack full confidence in the existing system, they may take costly actions resulting in lengthy delays and precautionary evacuations to ensure public safety.

- NAS recommended that the Federal Government should not attempt to implement the national central reporting system described in the Act. NAS cited the high startup and operational costs for such a system and the lack of assurance that its benefits would justify its costs. **DOT agrees with NAS and recommends no further congressional action on such a system.**

- NAS also recommended that DOT immediately undertake one or more demonstration programs of automated information systems and that the rail industry would be the practical place to start. A program similar to one recommended by NAS is currently in operation with the Federal Railroad Administration's (FRA) support of the Houston Cooperative Emergency Planning Project which focuses on practical, cost-effective communication linkages important to emergency responders. Based on the results of this cooperative effort involving labor, industry, carriers, the responder community, and the Federal Government, DOT will be in a better position to define and plan for any future efforts.

- NAS made a number of additional recommendations to improve the hazardous materials communication system. NAS recommended that an overall framework is needed to make improvements to the existing system and made further recommendations under each of three major categories: Implementing New Information Systems; Data and Evaluation; and Regulation, Enforcement, and Training. NAS makes an important contribution to highlighting the concerns of emergency responders and has improved DOT's understanding of the issues to be considered in making cost-beneficial improvements to the existing hazardous materials communication system.

- DOT has taken steps to improve the communication system which address issues raised by NAS. DOT implemented a grants program that provides funds for emergency response planning and for training emergency response personnel. DOT issued training regulations that require each hazardous materials employer to train its employees regarding the safe loading, unloading, handling, storing, and transporting of hazardous materials and emergency response preparedness for responding to accidents or incidents involving the transportation of hazardous materials. DOT issued emergency response communication standards that require display of 24-hour telephone numbers on shipping papers for emergency response information, and carriage of emergency response information on transport vehicles for immediate use.

- As part of a rulemaking proceeding to improve DOT's current hazardous materials communication system, DOT will issue a notice of proposed rulemaking (NPRM) proposing a number of changes to the current requirements for placarding vehicles transporting hazardous materials.

# BACKGROUND

## THE STATUTORY MANDATE

The Hazardous Materials Transportation Uniform Safety Act of 1990 (the Act), Pub. L. 101-615, required DOT to develop methods and study ways to improve hazardous materials identification systems. Section 25 of the Act specifically required DOT to--

- Initiate a rulemaking to determine methods of improving the current system of placarding vehicles transporting hazardous materials, and to determine methods for establishing and operating a central reporting system and computerized telecommunications data center;

- Contract with NAS to study the feasibility and necessity of establishing and operating a central reporting system and computerized telecommunications data center that: (1) is capable of receiving, storing, and retrieving data concerning all daily shipments of hazardous materials; (2) can identify hazardous materials being transported by any mode of transportation; and (3) can provide information to facilitate responses to accidents and incidents involving the transportation of hazardous materials; and

- Report to Congress DOT's summary of the NAS report and the results of DOT's rulemaking activities, together with DOT's recommendations concerning implementation of the NAS recommendation with respect to a central reporting system and computerized telecommunications data center. The Secretary of Transportation is to give substantial weight to the NAS recommendations and must include reasons for not recommending implementation of the recommendations contained in the report.

## THE CURRENT SYSTEM

The continued safe transportation of hazardous materials is critical to the conduct of our Nation's commerce. DOT and others have estimated that about 500,000 shipments of hazardous materials are moved each day nationwide. The vast majority of these shipments are packaged properly, meet other stringent requirements, and arrive at their destination safely. When incidents occur, most involve small releases of hazardous materials, result in little or no consequence, and do not require emergency response action. Far less frequently, serious incidents occur that require significant response actions by emergency responders. For example, following an analysis by DOT of the 9,320 incidents reported to DOT during 1992, 396, or only about 4 percent of the total, could be considered to have a consequence serious enough to warrant a significant emergency response. These incidents involved one or more of the following consequences: a fatality, major injury, general public evacuation, closure of a major artery, train derailment, or truck accident (overturn, collision, etc.).

At the Federal level, ensuring the safe transport of hazardous materials in commerce is primarily the responsibility of DOT. The Hazardous Materials Transportation Act (HMTA), 49 App. U.S.C. 1801 et seq., including amendments in 1990, sets forth the framework by which DOT exercises its statutory mandate "to protect the Nation adequately against the risks to life and property which are inherent in the transportation of hazardous materials in commerce." In Section 2(5) of the Act, Congress noted that "in order to achieve greater uniformity and to promote the public health, welfare, and safety at all levels, Federal standards for regulating the transportation of hazardous materials in intrastate, interstate, and foreign commerce are necessary and desirable."

The Research and Special Programs Administration (RSPA) is the primary agency within DOT responsible for issuing the Hazardous Materials Regulations (HMR), 49 C.F.R. Parts 171-180, which govern the safe transportation of hazardous materials in commerce. These regulations include hazardous materials classification, packaging, hazard communication, training, and operational rules. The current hazardous materials communication requirements under the HMR, which are essentially the same as those employed worldwide, are addressed in five components: shipping papers, marking, labeling, placarding, and emergency response information. Emergency response information must be maintained by carriers in their vehicles, trains, vessels, and aircraft when transporting hazardous materials. Required emergency response information is used to identify immediate hazards to health, risks of fire or explosion, precautions to be taken by responders first arriving at the scene of an incident, initial methods for handling spills and leaks in the absence of fire, and preliminary first aid measures to be taken. This information may be entered on shipping papers or presented in a document other than the shipping paper, such as the DOT Emergency Response Guidebook (ERG), Material Safety Data Sheets (MSDS), or other appropriate emergency response guidance.

## PRELIMINARY IMPLEMENTATION ACTIVITIES

To develop this report, DOT established a working group--comprised of representatives from RSPA, the Federal Highway Administration (FHWA), FRA, the Federal Aviation Administration (FAA), the United States Coast Guard (USCG), and the Office of the Secretary (OST)--to review and consider the NAS report. RSPA also reviewed comments to the advance notice of proposed rulemaking (ANPRM) under Docket HM-206. This report summarizes the NAS study and DOT's related rulemaking activities under Docket HM-206. It presents the Secretary of Transportation's recommendation concerning the NAS recommendation on the national central reporting system described in the Act, and identifies DOT actions that support each of seven additional recommendations contained in the NAS report.

## THE RULEMAKING PROCEEDING

In addition to the NAS study, Section 25 of the Act required DOT to initiate rulemaking proceedings to determine methods of improving the current system of placarding vehicles transporting hazardous materials. The proceedings should also determine methods for establishing and operating a central reporting system and computerized telecommunications data center for shipments of hazardous materials.

RSPA issued an ANPRM, "Improvements to Hazardous Materials Identification Systems" (Docket HM-206; 57 Fed. Reg. 24532, June 9, 1992). The ANPRM provided information about the legislative requirements in the Act concerning improvements to hazardous materials identification systems, an overview of the hazard identification and communication system under the HMR, including DOT's placarding system, and included a background discussion on the central reporting system and telecommunications center. Also, through a series of 63 primary questions, the ANPRM solicited comments on establishment of a central reporting system, methods of improving the placarding system, and the feasibility of requiring each carrier to maintain a continually monitored telephone system for emergency response purposes. The comment period closed on October 9, 1992.

Approximately 230 comments were received from shippers, carriers, firefighter and police departments, associations, emergency response telephone service organizations, and private individuals. Commenters responding to questions about the central reporting system and telecommunications data center--the need for its establishment and related issues, data entry and removal, system access and safeguards, use of the system by emergency responders, training in use of the system, and system costs--substantially opposed establishment and implementation of such a system, citing that it was unnecessary, unreasonably burdensome in terms of cost and complexity, and of little value to emergency responders. For example, of the 196 commenters responding to the ANPRM question: Should a centralized reporting system and computerized telecommunication center be established?, 170 were opposed to such a system on the basis that it was unwarranted, too costly, infeasible, and of minimal use to responders. Five commenters stressed that, instead, emphasis should be placed on training. Seventeen commenters opposed the system for all shipments but supported the application of some kind of electronic notification for tracking extremely hazardous materials. Three commenters said the central reporting system as envisioned needs further study. Four commenters supported establishment of the central reporting system; one without any qualification, and three on the condition that the Federal Government operates it.

The National Transportation Safety Board, commenting on whether a centralized reporting system and computerized telecommunication center should be established, stated that because it has not investigated any accidents in which a computerized tracking system would have affected the outcome of the response to the accident, it has no basis for comments on this issue.

Commenters responding to questions about placard visibility, placard size and location, placard information and format, placard construction, and exceptions from placarding, generally expressed the view that major changes to DOT's existing hazard communication system were not necessary but some improvements may be warranted.

RSPA is considering a number of specific regulatory proposals to improve the hazardous materials identification system and expects to issue a notice of proposed rulemaking in the Federal Register this fiscal year.

## THE NATIONAL ACADEMY OF SCIENCES' REPORT--A SUMMARY

In its effort to be responsive to requirements of the Act, NAS assembled a committee with expertise in hazardous materials safety, emergency response, freight transportation, and information systems to examine a broad range of issues. The NAS committee examined the kinds of information emergency responders may need in order to make decisions at the scene of a hazardous materials incident, the performance of the existing information system, and the frequency, causes, and consequences of information failures. NAS focused on hazardous materials highway and rail incidents that required responses by public sector emergency responders because these two modes are predominant transporters of hazardous materials. However, NAS noted that its conclusions and recommendations are relevant to all modes of freight transportation, including air and water.

Based on a review of case studies involving hazardous materials incidents, NAS concluded that, in most instances, the existing hazardous materials communication system works and the information sources available at the scene of a hazardous materials incident meet the critical information needs of responders. However, NAS stated that the system appeared not to have provided emergency responders with information they needed in a timely and reliable manner in about 19 of 80 truck cases and in about 5 of 45 rail cases reviewed.[1] NAS estimated that about 1 percent of all truck incidents (100 to 200 per year) and less than one-half of 1 percent of all rail incidents (4 to 6 per year) would have both an information problem and a "consequential" outcome. Consequential outcomes are defined in the report as a fatality, injury, evacuation, or major highway or track closing. NAS categorized cases as having an information problem when one or more placarding, shipping paper, package labeling, or other existing information sources were inaccurate, unavailable, not found, or not properly consulted by responders.

Based on its review of 125 truck and rail case studies, NAS identified the kinds of critical information responders need, including the presence of hazardous materials; the types of hazards they possess; and the technical names, quantity, and packaging of materials. NAS noted that the existing DOT hazardous materials communication system fulfills these needs in a variety of ways. Placards provide early and clear warning about the presence of hazardous materials. Placards also provide information on the types of hazards present in transportation primarily through symbols, colors, and United Nations/North American (UN/NA) material identification numbers. More detailed information is found on shipping papers; on markings and labels on vehicles and packagings; in the DOT Emergency Response Guidebook; and from shipper emergency telephone numbers and from other sources such as the Chemical Transportation Emergency Center (CHEMTREC).

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[1] Based on extrapolation by NAS of this limited number of case studies, emergency responders would have an information problem in 25 percent of the 10,000 to 20,000 truck incidents projected annually, or in about 2,500 to 5,000 instances, and in 10 percent of the 1,000 to 1,500 rail incidents, or between 100 to 150 incidents, each year.

The information sources required by DOT, when accurate, available, and properly consulted, provide valuable critical information needed by emergency responders. However, NAS identified 6 common information problems (in 19 of the truck cases and in 5 of the rail cases) examined and offered some potential solutions for DOT to consider. NAS noted that--

(1) Required sources of information were missing or inaccurate.
(2) Information sources were obscured, destroyed, or inaccessible because of fire, wreckage, or other impediments. NAS proposed evaluation of retroreflective and fire resistant materials and other means to increase placard visibility and longevity.
(3) Information sources were available and in compliance with the regulations, but they failed to fully or efficiently convey essential information. NAS proposed that DOT address the problems it found, particularly with mixed loads and the adequacy of the "Dangerous" placard, and difficulties encountered by emergency responders with multiple shipping papers.
(4) Essential information was not provided because the shipment was not covered by DOT regulations, i.e., the material was (a) not designated hazardous by DOT, (b) shipped in quantities below the weight limit set by DOT for placarding, or (c) not involved in an activity that was clearly transportation related and under DOT jurisdiction.
(5) Vehicle operators did not (or could not) assist emergency responders in obtaining essential information. NAS proposed better training for shipper and carrier personnel.
(6) Responders did not properly use available information. NAS, again, proposed a training solution.

Items 1, 3, and 4 accounted for most of the failures which were studied. NAS stated in its report that more effective regulations, enforcement, and training should be the foundation of any improvement in emergency response before DOT moves to make improvements that take advantage of new technology.

NAS did not support implementation of the national central reporting system described in the Act because such a system would be too expensive, would not likely be cost beneficial, and would be unlikely to function as intended. NAS said that the problem the system described in the Act was intended to correct--incidents in which papers or placards are inaccessible because of a crash or fire--was only one category of six discovered, and was not the most frequent problem found by NAS. For example, of the 80 truck cases reviewed by NAS, only 3 (or less than 4.0 percent) clearly had an information problem attributed to placarding or shipping paper losses because of a crash or fire.

However, NAS did conclude that there is a need to improve information for use by emergency responders at the scene of hazardous materials truck and rail incidents and made several recommendations. Instead of a national central reporting system, NAS recommended that DOT take other actions: test new information systems (one or more limited startups); develop better data; and take regulatory, enforcement, and training actions.

According to NAS, one the most significant problems needing to be addressed is the need to overcome the lack of full confidence that some emergency responders have in the existing hazardous materials communication system. NAS noted that this lack of confidence sometimes results in overly cautious, frequently inappropriate, and costly decisions by emergency responders. NAS identified millions of dollars of costs that could be avoided, but cautioned that only an unknown portion of the costs can be attributed by information problems. Injuries, property loss, major highway closings, public evacuations, and response resources were considered in estimating costs which might be avoided if there were an improved hazardous materials communication system. While better information might reduce costs by some fraction, in the cases reviewed that had injuries as the consequence, improvements in emergency response information would not likely have altered the outcomes. NAS found that many of the adverse consequences noted in the case studies were the direct result of the crash, derailment, or other event that led to an incident and were unrelated to the hazards of the materials being transported.

NAS acknowledged that its conclusions were supported by a limited data base of 125 cases. Examinations of 40 truck incidents contained in brief reports to the California Hazardous Materials Incident Reporting System (CHMIRS) were followed up by telephone contacts with the persons involved in each response to assess the information available to them during the incident. The remaining 85 cases--40 additional truck cases and the 45 rail cases--were developed from analysis of documentation from previous investigations conducted by the National Transportation Safety Board (NTSB). The truck and rail cases were supplemented using information contained in RSPA's Hazardous Materials Information System (HMIS), CHEMTREC notification data, some highly publicized incidents described in newspaper articles, and during interviews with emergency responders. Although NAS cited the need for better data and noted their shortcomings, it found that the information obtained from the case studies and other sources aided understanding of emergency responder information needs.

NAS considered a range of technological and nontechnological solutions to the information problems the committee found. Technological options included looking at the cost, technical feasibility, and organizational requirements of the national central reporting system described in the Act and other designs such as limited startups (demonstration programs) or phased-in approaches. Nontechnological options included looking at opportunities to refine the existing regulatory, enforcement, and training portions of the hazardous materials identification system that would not necessarily depend on new information technology.

## THE NAS RECOMMENDATIONS AND THEIR IMPLEMENTATION BY DOT

### The National Central Reporting System Described in the Act

1. **"The government should not attempt to implement a system such as the originally proposed national central reporting system, that is, one entailing immediate and universal application of a requirement for shipper or carrier real-time filing of vehicle contents information in a central data base."**

Summary of NAS Recommendation (1)

As required by the Act, DOT contracted with NAS to study the feasibility and necessity of establishing and operating a central reporting system and computerized telecommunications date center that is capable of receiving, storing, and retrieving data concerning all daily shipments of hazardous materials, that can identify hazardous materials being transported by any mode of transportation, and that can provide information to facilitate responses to accidents and incidents involving the transportation of hazardous materials. NAS concluded that the Federal Government should not attempt to implement the national central reporting system described in the Act. NAS cited the high startup and operational costs for such a system and the lack of assurance that its benefits would justify its costs.

NAS found that such a system was not aimed at the most serious failures of the existing hazard communication system and, while information technology can make important contributions to emergency response, this potential is most likely to be attained through an approach relying on phased implementation of improvements.

The system described in the Act was intended to improve responses to incidents in which papers or placards were inaccessible because of a crash or fire. NAS noted that this was only one of six categories of information problems identified and not the most frequent one. Such a system did not meet three criteria considered in the report as necessary for it not to fail. It lacked performance criteria based on an understanding of the existing system, did not build on an existing information system as a practical approach, and was not intended to be phased in using carefully planned steps. NAS concluded that because of these shortcomings, the system would be unlikely to function as intended. NAS's estimate for a prototype system was placed at $300 million for initial capital and startup costs with an annual operating cost of about $250 million. Based on these estimates, NAS concluded that the overall costs would outweigh the benefits associated with reducing information failures.

DOT Actions on NAS Recommendation (1)

**DOT agrees with NAS and recommends no further congressional action on such a system.** DOT believes that the national central reporting system described in the Act would be extremely complicated, burdensome, and expensive in its implementation, and of questionable benefit. Following a thorough review of the NAS report and based on its own analysis, DOT finds that the current hazardous materials communication system (DOT shipping paper, package labeling, placard, and 24-hour phone number requirements) can meet the needs of emergency responders. However, DOT recognizes that improvements to the existing information system for emergency responders may be necessary.

- DOT has taken several actions to address issues raised by NAS. Of the 125 cases reviewed by NAS, most occurred before DOT finalized certain actions already undertaken to improve the existing information system. DOT issued a final rule under Docket HM-126C, "Emergency Response Communication Standards," on August 17, 1990, that amended the HMR to include new requirements for additional emergency response information on shipping papers and packages, and maintenance of emergency response information on transportation vehicles and at transportation facilities. This regulatory action offers significant improvements in the information available to police and firefighters responding to hazardous materials incidents and to transportation workers. First, critical emergency response information is required to be maintained on the transport vehicle, train, vessel, or aircraft during transportation of the hazardous material in the same manner as is required for shipping papers. Second, shippers who offer hazardous materials for transportation must also enter a 24-hour emergency response telephone number on the shipping paper. The number must be monitored at all times while a shipment is being transported or stored incident to transportation. In effect, a first responder using that number should be able to contact, in one phone call, a person who is either knowledgeable about the material and has comprehensive response and mitigation information, or has immediate access to such a person. Third, DOT's shipping paper information, package markings, hazard warning labels, and vehicle placards (which are cross-referenced in the DOT Emergency Response Guidebook) lead to on-the-scene guidance for initial actions to be taken in response to hazardous materials incidents. Since 1980, RSPA has distributed (without charge) more than 3.5 million copies of the DOT Emergency Response Guidebook to emergency response entities throughout the United States.

- Since the time of the incidents cited in the NAS report, DOT implemented the HMTA Public Sector Training and Planning Grants program that has provided $8.4 million for emergency planning and for training emergency personnel. DOT anticipates that 180,000 responders will be trained with grant funds in the first year of the program, 81 percent of whom are firefighters. In addition, the grant funds will be used by local emergency planning committees for developing, improving, and implementing emergency plans; for conducting commodity flow studies; and for determining the need for regional hazardous materials response teams.

- The incidents examined by NAS do not reflect the expected benefits of national training curriculum guidelines for emergency responders that have been developed recently by DOT with substantial assistance from the Federal Emergency Management Agency (FEMA), the Environmental Protection Agency (EPA), the Department of Labor's Occupational Safety and Health Administration (OSHA), the U.S. Department of Energy (DOE), and state and local experts. The curriculum, which is supported by funds allocated under the grant program, will assist the states in the development of their training programs. DOT's guidance is provided to encourage local implementation of first responder general awareness training, and other training consistent with OSHA and National Fire Protection Association (NFPA) standards.

- DOT issued a final rule titled, "Training for Safe Transportation of Hazardous Materials" that addresses training concerns raised by NAS. The date for industry to comply with the training requirements was October 1, 1993. The regulation is intended to enhance the training requirements for persons involved in the transportation of hazardous materials by requiring that all hazardous materials employees be trained in their duties by their employer. DOT anticipates that these regulatory requirements will increase a hazardous materials employee's awareness of safety considerations and improve compliance in the loading, unloading, storing, and transportation of hazardous materials.

- Most comments in response to the ANPRM regarding the central reporting system and computerized telecommunications data center did not support its implementation. Of the commenters who responded to this issue, 86 percent opposed its establishment as being unwarranted and too costly. For example, the American Trucking Associations (ATA) stated that the information provided by such a system would be wrought with data entry errors and would have an exorbitant expense to the industry. They indicated that at an estimated 500,000 hazardous materials shipments per day, with each entry containing only 25 keystrokes at a 1 percent error rate of entry, emergency responders would encounter over 45 million errors per year. ATA agreed with estimates that the annual expense of such a system could be approximately $12.5 billion per year. The National Agricultural Chemicals Association (NACA), stated that the current DOT hazardous materials identification system is very effective in identifying the hazards present in transportation and sees no need for a major change. It concluded that a centralized tracking system would be cost prohibitive, burdensome and discriminatory against small businesses. The NACA stated that, at the agricultural chemical distributor level, each vehicle can deliver several truckloads per day with six or seven dropoffs typical for each load. According to NACA, at a cost of $12 to $14 per entry, the tracking system costs could exceed $500 per vehicle per day. The Petroleum Marketers Association of America (PMAA), representing more than 10,000 mostly small business entities, stated that a central reporting system is unnecessary and would offer only increased costs with no significant benefit.

Based on the comments in response to the ANPRM, and upon full consideration of the NAS report, DOT agrees with NAS that the national central reporting system described in the Act would not function as intended nor produce benefits beyond its costs.

**Actions Needed to Improve Hazardous Materials Emergency Response Information**

2. **"Improvements to the existing system for providing information to emergency responders at hazardous materials incidents are necessary. Therefore, Congress, DOT, and other responsible federal agencies should plan and carry out a program to improve the system. This program should include appropriate measures to apply technology; reforms in regulations, enforcement, and training; and evaluation of the existing system so that efforts can be directed at the most pressing problems."**

Summary of NAS Recommendation (2)

NAS concluded that although this overall approach would take some time, it would likely provide the quickest improvements and offer the highest success rate. It noted that failure will result without a thorough needs assessment and testing effort. The report suggested that, as a first step, DOT, together with other responsible agencies, should estimate the costs of the study recommendations that call for data collection and evaluation, and submit proposals to Congress for funding. It further stated that based on these proposals, Congress should provide to the responsible agency the funds and direction needed to act.

DOT Actions on NAS Recommendation (2)

- DOT believes ongoing initiatives, including rulemaking under Docket HM-206, will improve information for emergency responders and should reduce the impacts of such hazardous materials incidents. DOT's actions are fully compatible with the NAS recommendations and recognize improvements to the existing information system for emergency responders may be necessary.

**Implementing New Information Systems**

3. **"DOT should immediately undertake one or more limited start-ups of automated information systems."**

Summary of NAS Recommendation (3)

NAS concluded that limited startups, or demonstration programs, should be undertaken by DOT as controlled experiments with independent, rigorously designed evaluation protocols and noted that a rail industry limited startup would be a practical starting point. According to NAS, the current information system, TRAIN II, could be modified to provide information on car contents to emergency responders. All participants, including responders, should be involved in defining performance criteria and planning the evaluations. It concluded that the demonstration programs should be designed, conducted, and evaluated under a cooperative arrangement among participating Federal, state, and local government agencies and participating shippers and carriers.

Three examples of possible limited startups were offered by NAS:

A) "Emergency responder access to rail industry car-tracking and way-bill data systems"--

NAS recommended that a demonstration of automated information systems in the rail industry would be the place to start since all large railroads have shipper information programs in place. A limited rail startup demonstration, according to NAS, would be relatively easy to organize and to evaluate whether it would be of value to emergency responders. NAS concluded that a rail demonstration program would address a number of organizational, technical, and cost-effectiveness issues related to any emergency response information system. Important to the selection of a rail startup demonstration is the fact that most of the shipper information can currently be provided over computer networks or via synthesized voice messages using ordinary telephones. Modifications to the system could provide vehicle specific information to emergency responders. The cost of a 2-year limited rail industry startup is estimated by NAS at $4 million and includes costs of 1 railroad application, 30 emergency responder agencies, and evaluation. For an additional $3 million, the startup could be expanded to a third year to embrace a nationwide system bringing in all major railroads and about 90 responder agencies. NAS estimated that the total cost for the 3-year startup would be $7 million.

B) "Incorporation of hazardous materials monitoring functions in truck automatic electronic identification demonstration projects, which Federal and state transportation agencies now have under way or planned"--

A new demonstration program, focusing on monitoring hazardous materials through application of automatic electronic identification technology as part of DOT's ongoing Intelligent Vehicle Highway System (IVHS) program, is not only feasible, but, according to NAS, would have some utility for experimental hazardous materials applications. A highway startup demonstration would probably suffer from the lack of a highly developed infrastructure and parallel industry investment necessary to get it beyond the prototype or experimental stage quickly.

One IVHS project, The Crescent Demonstration of the Heavy Vehicle Electronic License Plate Project, has been demonstrating applications of automatic electronic identification technology, but without a specific hazardous materials component. Another project within DOT's IVHS program, the Advantage I-75 project, will be demonstrating similar applications shortly. These two programs currently are designed to use technology to electronically "clear" safe and legal trucks. Truck weight, safety, and credentials will be checked as part of the process. Both projects incorporate 1) fleets of trucks equipped with electronic identification transponders; 2) a major truck highway corridor equipped with the necessary technology and communications at weigh stations and ports of entry; and 3) a centralized facility linked to those facilities to maintain a single data base on participating trucks in their respective corridor. In the Advantage I-75 project, some of the data will be carried in the vehicle transponder while other data will be located in a central data base. The goal of these projects is to develop the highway and information infrastructure to electronically clear safe and legal interstate and intrastate motor carriers. Some of these technologies and databases could also be used to track or identify the type of hazardous materials being transported. The simplest hazardous materials add-on component, suggested by NAS, involves entering hazardous material waybill information in the truck's central data base record when information about various permits and safety data is entered. This prototype would piggy-back on the existing data base system but would not test the utility of a transponder. Beyond this simple demonstration, the transponder could be included by equipping emergency responders with portable readers to allow them to locate trucks in the central data base. Under another option, a write capability could be added to the transponder to provide emergency responders with information about the hazardous materials. According to NAS, keeping records up to date would present a major difficulty and might require the use of additional techniques such as a bar code or "smart card" label technology.

C) "Emergency responder access to carrier shipment-tracking systems via an established information network service"--

A demonstration program allowing responders access to a third-party service to obtain waybill information for a specified trailer, railcar, or container is also technically feasible according to NAS but would be costlier than the NAS recommended rail industry demonstration program. A network service-based demonstration program would require substantial investment in the development of new systems because existing services fall short of the requirements of a hazardous materials information system. According to NAS, demonstrating a network service-based system in the trucking industry would also suffer from the lack of a highly developed infrastructure and parallel industry investment present in the rail industry and would be experimental for some time.

DOT Actions on NAS Recommendation (3)

- The example provided by NAS concerning emergency responder access to rail industry car-tracking and waybill data systems is being addressed by DOT. FRA has initiated the Houston Cooperative Emergency Planning Project which is aimed at assisting emergency responders. This project is to be completed by the fall of 1994, and is focused on providing practical, cost-effective communication linkages important to emergency responders.

As part of this project, FRA has facilitated the establishment of a direct link between Houston's Port Terminal Railroad's freight car/customer operations computer bank and the Houston Fire Department's hazardous materials group. This link was established to implement a practical demonstration and evaluation of enhanced train and car contents information as the first step in providing accurate decisionmaking information to first responders to rail accidents. The working group established under this project includes representatives from FRA, railroads, Houston-area fire and police agencies and rail labor, as well as city and state emergency agencies and the petrochemical industry. DOT believes this is the first direct computer link between a railroad and a major fire department designed to exchange hazardous material and freight train information for the benefit of first responders. While much remains to be accomplished, DOT is confident that it will yield substantial information which may lead to enhancements that will be available for implementation by other railroads and localities. Presently, FRA and the Port Terminal Railroad Association (PTRA), the principal railroad operating entity serving the Port of Houston, Texas, share equally in the project cost, each contributing approximately $200,000 in either cash, contract support, salaries or other in-kind expenses. RSPA has recently entered into a reimbursable agreement with FRA to expand upon the Houston project to: (1) better determine the extent and kinds of emergency responder information needed at the scene of a hazardous materials incident; (2) consider the value of improved information to emergency responders; and (3) identify and/or evaluate related organizational, technical, and cost-effectiveness issues addressed by an emergency response information system. In particular, RSPA is pursuing, under this arrangement, the development of user-friendly software guidelines designed to answer emergency responder information questions and to demonstrate its benefit in reducing the overall cost of hazardous materials incidents. DOT is awaiting the results of this initiative before it takes more specific actions on the NAS recommendation on the limited startups.

- The example provided in the NAS report concerning incorporation of hazardous materials monitoring functions in truck automatic electronic identification corridor demonstration projects is being addressed by FHWA. A similar application is proposed under the IVHS program as part of a Commercial Vehicle Operations (CVO) service, "Hazardous Materials Incident Notification," and will be accelerated to explore the feasibility of establishing electronically an information link between the highway vehicle and the emergency response community.

- The example provided in the NAS report concerning emergency responder access to shipment-tracking systems of carriers via an established network service is also under consideration and is an element incorporated under the FRA/RSPA "Houston" project previously identified.

**Implementing New Information Systems (continued)**

4. **"DOT should, on an ongoing basis and in conjunction with the shipper and carrier industries and emergency responders, systematically investigate opportunities for application of information technology to aid emergency responders and reduce the costs of hazardous materials incidents."**

Summary of NAS Recommendation (4)

NAS concluded that, when implementing new information systems, DOT should ensure that automation be introduced in planned steps allowing for evaluation and modifications to solve problems. System applications should capitalize on already developed information and communications systems used by shippers, carriers, and responders. Piggybacking on already established, known, reliable systems has major pay-offs; this is especially important in ensuring the credibility of the system to the emergency responder who, according to the report, is sometimes wary of current shipper information. NAS concluded that another highly critical criterion in system design is providing for the security of proprietary business data. It recommended that DOT track technical developments in transportation information and communications systems to identify opportunities for improving hazardous materials safety.

DOT Actions on NAS Recommendation (4)

- DOT is always looking for new ways to use technical developments in information systems that will enhance the safe transport of hazardous materials in a cost-beneficial manner. Through the FHWA, DOT is exploring hazardous materials applications of IVHS. FHWA anticipates that the application of advanced technology will improve emergency response information for highway-related accidents or incidents. One IVHS component, CVO, targets technological applications for use in hazardous materials monitoring and tracking as well as route planning and shipment scheduling. Recently, DOT explained its five-part strategy for using its funding to accelerate the IVHS program. The strategy includes: (1) accelerating IVHS product development through expanded research and development activities; (2) expanding operational testing of promising IVHS technologies and concepts; (3) leveraging existing Federal investment in technology, including defense technology; (4) establishing a National Commercial Vehicle Network; and (5) accelerating development of the Automated Highway System. Some aspects of IVHS should have direct applicability to improving information for emergency responder use.

- On May 27, 1993, DOT and the Department of Defense (DOD) jointly agreed to establish a task force to determine how to maximize use of DOD's Global Positioning System (GPS) in satisfying both military and civilian needs. GPS is a space-based positioning and navigation system that uses a network of Navstar satellites. While the GPS system originally focused on military needs, DOT and DOD want to maximize civilian uses to increase transportation safety, efficiency, and economic growth.

- DOT continues to monitor technology advancements and is aware that vehicle tracking via satellites is becoming more routine in the transportation industry. Over 50,000 commercial motor vehicles are presently equipped with some form of high technology mobile communications equipment for better customer services, internal inventory control needs, shipment security, increased productivity, and other business reasons. While safety has not been a principal motivation for the installation of such systems, they must be acknowledged as providing a means for improved safety, including the safe transportation of hazardous materials. The system employed by DOD illustrates one manner of application.

- DOD has 16 carriers operating 1,006 commercial motor vehicles equipped with transponders that are participating in DOD's Defense Transportation Tracking System (DTTS). DTTS is an automated data processing satellite-based system designed to track and monitor shipments of certain security sensitive and/or highly hazardous materials on a 24-hour basis. DOD's Military Traffic Management Command issued a Notice (58 Fed. Reg. 52951, October 13, 1993) to include additional categories of hazardous materials, such as uncategorized munitions and missile fuels; the system offers the potential to track and monitor other high-hazard commodities, high-value shipments, and classified items. The system is expected to track approximately 57,000 shipments during Fiscal Year 1994. DTTS couples two-way digital communications and computer technology with commercial motor vehicles; uses real-time positioning and communications, and supports some aspects of emergency response through an established network of state police notifications. While this satellite monitoring system is relatively expensive to operate, effective October 1, 1993, motor carriers participating in the satellite monitoring system will receive a maximum of $.13 per mile, a reduction from the previous maximum level of $.22 per mile, that is paid to carriers in addition to their transportation rates. The earlier rate charge was established, in part, to offset initial capital outlays incurred by carriers for transponders, mobile communications equipment, and related technologies. In addition to the satellite monitoring system costs, which are estimated at about $9 million annually ($160 per shipment x 57,000), there are also annual operational costs of approximately $1.2 million associated with management, programming, and maintenance of a central operations site.

- DOE's transportation tracking and communications system, TRANSCOM, combines satellite communications, computerized database management, user networks, and ground communications for monitoring enroute shipments of radioactive materials. In the event of an incident, the vehicle operator can contact the system's control center for appropriate action, and communicate with key emergency response personnel, state, and DOE field offices. TRANSCOM tracks thousands of shipments annually at a cost to DOE of between $700,000 and $800,000. In addition, individual carriers assume the cost burden associated with equipping their vehicles with transponders and related communications equipment. DOE is looking at the feasibility of developing electronic waybills and related technology to facilitate more rapid transfers of information between its data base and individual shippers and carriers.

- FHWA's Management Information Systems Coordinating Group meets regularly with its field enforcement staff to review opportunities for applications of information technology, to reduce motor carrier accidents and incidents, and to improve the system, including its data and information delivery.

## Data and Evaluation

5. **"The U.S. Fire Administration, DOT, and the other federal, state, and local agencies that maintain data bases of hazardous materials incidents should formally coordinate to ensure that data are defined and collected uniformly, duplicate reporting is avoided, and data collection is designed to serve essential program evaluation and research needs."**

### Summary of NAS Recommendation (5)

NAS stated in its report that the U.S. Fire Administration would be the appropriate lead in coordinating data base uniformity. NAS reported that its study was hampered by inadequate data and the lack of previous studies on the subject. Specifically, NAS identified that two types of data were needed: (1) incident statistical data and (2) performance data.

Both types of data were found lacking by NAS. Incident data were seldom suitable for comparison with other incident data and individual data bases were frequently inadequate. Because of the limitations of the existing incident data sources, NAS relied on RSPA's HMIS, California's state incident data found in CHMIRS, and CHEMTREC notification data for use in its study. According to NAS, data on the performance of the information system are even more limited than incident data. It observed that RSPA's HMIS data base does not indicate whether local police or fire departments responded to an incident, nor does it indicate whether or not information sources required by DOT (placards and shipping papers) were present as required or the degree to which they were effective. HMIS data do reflect whether police or fire responders were injured or suffered fatalities at the scene of an hazardous materials incident. NAS stated in its report that HMIS is designed for other purposes and should not be expected to capture emergency responder information. HMIS incident reports are filed by persons subject to DOT regulations, not local emergency responders. NAS noted that no state sources provide the level of detail the study needed to evaluate the performance of the existing information system.

### DOT Actions on NAS Recommendation (5)

- The U.S. Fire Administration, through the Working Group established under the Firefighter Safety Study Act, (Pub. L. 101-466), in cooperation with DOT and other Federal agencies, industry, and emergency response and firefighting organizations, conducted a query of Federal, state, and local data bases for the purpose of identifying the most common reported chemicals involved in transportation related incidents. The Working Group's preliminary finding is that comprehensive incident data do not exist in a uniform fashion sufficient to fully characterize hazardous materials incidents nationwide.

- DOT's Bureau of Transportation Statistics (BTS), created under the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), has been established to compile, analyze, and make available information on the Nation's transportation systems and will enhance the quality and effectiveness of statistics to ensure uniform data collection--including information important to emergency responders.

- FHWA operates SAFETYNET, a cooperative effort to share motor carrier inspection and accident information, including accidents involving hazardous materials, among states and FHWA. Of particular importance is the fact that the system specifically contains data elements directly related to hazardous materials, including placarding. Inspection data reflect all violations noted including those related to noncompliance with shipping paper and related hazardous materials information requirements. For each accident, the system asks whether the vehicle was placarded and, if so, requests the 4-digit placard number, the hazardous materials name indicated on the placard, the 1-digit class number located at the bottom of the placard, and whether a hazardous material was released from the vehicle. All states have been requested to begin uploading accident data by January 1, 1994.

- RSPA's HMIS contains a user-friendly, menu-driven program, which is easily accessible to state and local agencies, including the emergency responder community. State and local agencies use HMIS menus for various purposes, including identifying spill activity at local levels to promote better response planning and to develop hazardous materials guidelines. HMIS contains information on packaging failures which may be important to responder personnel. Once all intrastate carriers and shippers are required to comply with the HMR, as proposed under RSPA Docket HM-200, HMIS is expected to include intrastate hazardous materials incident spill data.

- In addition to written incident reports, certain hazardous materials incidents are reported telephonically through the National Response Center (NRC) operated by USCG. NRC has an electronic link with CHEMTREC, an industry sponsored program operated by the Chemical Manufacturers Association, Inc., that provides first responders, the transportation industry, medical professionals, and others with access to response information and technical assistance from chemical industry experts for incidents involving hazardous materials. The telephonic reporting process may generate a contact between NRC staff and a Federal on-site coordinator--an EPA or USCG regional representative.

- DOT established the Federal Interagency Transportation Statistics Committee (FITSC), comprised of DOT, the U.S. Department of Commerce's Bureau of the Census and Bureau of Economic Analysis, DOD's Army Corps of Engineers and Military Traffic Management Command, the U.S. Department of Agriculture, and the U.S. Customs Service, to exchange data and information between users and suppliers of freight related data and to make improvements to hazardous materials data. Two areas of current interest to the FITSC's Working Group on Goods Movement Data are (1) the identification of hazardous materials data elements important to each member and (2) the promotion of uniformity of data collection. Some of the data elements for cross database comparison are directly related to emergency response, placarding and other informational documentation at the scene of a hazardous materials incident. DOT anticipates that the results of these efforts should be valuable to the emergency response community.

**Data and Evaluation (continued)**

6. **"DOT should establish a monitoring capability that allows it to determine whether its regulations intended to provide emergency responders with information at hazardous materials transportation incidents are working adequately."**

Summary of NAS Recommendation (6)

Closely related to the issues raised in the report for better and more comparative data, NAS concluded that DOT must better understand the informational needs of the emergency responder at hazardous material incidents; how frequently, and the reasons why, existing practices do not always provide the information needed by the responder community. According to NAS, DOT's existing HMIS was not designed to perform a monitoring function; therefore, a new data collection method is needed. The NAS report suggested that a more practical approach would be to develop a new data collection method founded on a statistically valid sampling procedure; DOT should select a sample of incident records from emergency response agencies and investigate them to monitor the effectiveness of the existing system. The existing system should be compared to evaluations related to the recommended limited startups.

DOT Actions on NAS Recommendation (6)

- The HMTA Public Sector Training and Planning Grants program, administered by RSPA, provides funding for training emergency responders, state and local agency development, improvement, and implementation of emergency response plans including commodity flow studies, the application of computerized technology, and database management for use by or in establishing regional emergency response teams. In conjunction with FEMA's Emergency Management Institute, OSHA, DOE, EPA, the Bureau of Indian Affairs, and the National Institute of Environmental Health Sciences, RSPA has conducted extensive outreach in the hazardous materials emergency response community. A practical product of this effort is the document, "Guidelines for Hazardous Materials Training." This document, written by a national team of responders and others, reflects the needs of responders and includes information from the entire response community. The guidelines and a national list of hazardous materials courses will be produced by the HMTA Public Sector Training and Planning Grants program and updated annually using input from firefighters and other hazardous materials responders.

- DOT monitors the extent to which the DOT Emergency Response Guidebook (ERG) and the HMR meet the needs of the emergency response community. This is accomplished in a variety of ways, including informal feedback from firefighters, police, and medical services personnel to DOT, and by formal public meetings to seek comments and to review the ERG before its periodic republication. Feedback is also promoted through DOT representation on national standard setting committees, such as the National Fire Protection Association's

Technical Committee on Hazardous Materials Response Personnel (Standard 472), and the International Fire Service Training Association's Hazardous Materials Training Committee.

- RSPA, FHWA, FRA, USCG, and FAA have established a Uniform Shipper Data System to coordinate enforcement and inspection activities in order to monitor, in part, the effectiveness of the hazardous materials regulations.

**Regulation, Enforcement, and Training**

7. **"DOT, together with the other responsible federal agencies, should form a plan of action to alleviate each of the six categories of information failures identified in this study through changes in regulations, more effective enforcement, and support for improved training of emergency responders and inspectors."**

Summary of NAS Recommendation (7)

According to NAS, the six information problems common to the case studies reviewed could be best addressed by regulatory, enforcement, and training actions before applying technological solutions.

The report identified deficiencies it found in regulations, enforcement, and training components that had been in effect at the time of the study. It further identified potential solutions to the six categories of information failures noted earlier, and recommended that a systematic approach needs to be employed by DOT to address each problem. Moreover, the report noted that DOT must monitor the existing system to identify problems before it can start to identify, evaluate, and implement solutions. DOT should also consider the costs and benefits of new regulations together with enforcement and training actions designed to reduce historical incident costs. The report supported the need for DOT to reach out to emergency responders beyond the context of its rulemakings. The current open rulemaking (Docket HM-206) was identified by NAS as offering the opportunity to address some of the problems.

Enforcement options were considered by NAS based on evidence uncovered during its case research and emergency responder interviews. In particular, compliance with placarding, shipping paper, and related documentation requirements were cited as being less than adequate. To better gauge the level of compliance with the hazardous materials regulations, NAS noted that a systematic nationwide monitoring effort is needed since counting the number of citations is unreliable due to nonuniform enforcement practices and differing inspection priorities among jurisdictions.

Training options were highlighted by NAS to address problems found for the two categories of information failings concerning vehicle operator and emergency responders. NAS suggested that training aimed at improving communications between vehicle operators, shipper and carrier personnel, and emergency responders could alleviate some problems.

The need for additional Federal resources and technical assistance to improve responder hazard identification skills making use of a formal curriculum was identified in the report as one possible means of addressing the problem of responders who fail to obtain or use information at-hand.

DOT Actions on NAS Recommendation (7)

Regulations--

- RSPA initiated a rulemaking proceeding to address placarding and hazard communication issues and the establishment of the central reporting system and telecommunications data center for shipments of hazardous materials as required by the Act, and published an ANPRM (Docket HM-206; 57 Fed. Reg. 24532, June 9, 1992). Docket comments are being reviewed and RSPA expects to publish an NPRM in the Federal Register this fiscal year.

- RSPA issued an NPRM, "Hazardous Materials in Intrastate Commerce," based on its own initiative and subsequently required by the Act, that proposes to extend the application of the HMR to all intrastate hazardous materials transportation (Docket HM-200; 58 Fed. Reg. 36920, July 9, 1993). This action will promote national uniformity in hazardous materials transportation practices, an area important to emergency responders.

- DOT has been working with OSHA on its proposed rule concerning retention of markings and placards in accordance with Section 29 of the Act (Docket H-022; 58 Fed. Reg. 47690, September 10, 1993). This rulemaking is intended to ensure that employers in receipt of packages, containers, motor vehicles, rail freight cars, aircraft or vessels which contain hazardous materials and which are required to be marked, placarded, or labeled in accordance with the HMR, retain these hazard communications until the hazardous materials have been removed.

Enforcement--

- RSPA is initiating a contract, through its Volpe National Transportation Systems Center, to design a study to determine the extent to which shippers and carriers may not be in compliance with the placarding and shipping paper requirements of the HMR.

- Consistent with the Act, DOT has addressed enforcement and related issues raised by NAS by increasing the maximum civil penalty that may be assessed for violations of the HMTA and the regulations issued under the HMTA, and by establishing a minimum civil penalty amount in its final rule, "Amendments to the Hazardous Materials Program Procedures and Regulations" (Docket HM-207; 56 Fed. Reg. 8616, February 28, 1991).

- FHWA's Motor Carrier Safety Assistance Program (MCSAP) provides Federal financial grants to states to enforce the Federal Motor Carrier Safety Regulations and the HMR or compatible state regulations pertaining to commercial motor vehicle safety. MCSAP places a high priority on the conduct of roadside safety inspections of hazardous materials carriers, with emphasis on documentation and placarding requirements. FHWA also conducts safety reviews at the office's of hazardous materials carriers and shippers.

- RSPA's Hazardous Materials Transportation Registration and Fee Assessment Program requires certain persons involved in interstate, intrastate or foreign transportation of hazardous materials to register with DOT and pay a fee. One of the registration program's primary goals is to promote compliance with certain hazardous materials regulations by improving carrier and shipper knowledge about the HMR through education and outreach efforts conducted by DOT. DOT distributes brochures describing the requirements of the registration program and refers interested parties to the appropriate sections of the HMR to address specific questions related to hazardous materials transportation.

- FHWA, working with the Commercial Vehicle Safety Alliance (CVSA), has established a working committee to address uniform sanctions nationwide. CVSA is an association of state and provincial officials responsible for the administration and enforcement of motor carrier safety laws in the United States and Canada, working together with the Federal Government and industry to improve commercial vehicle safety.

Training--

- The HMTA Public Sector Training and Planning Grants program provides funding for the training of emergency responders. Eligible state and Indian tribe applicants may receive funding for the following activities: (1) An assessment to determine the number of public sector employees who need the proposed training and to select courses consistent with the National Curriculum; (2) Delivery of comprehensive preparedness and response training to public sector employees; (3) Emergency response drills and exercises associated with emergency preparedness plans; (4) Expenses associated with training and activities necessary to monitor such training; (5) Provision of staff to manage the training effort for local and regional responders; and (6) Additional activities deemed appropriate by the Associate Administrator for Hazardous Materials Safety.

- RSPA has issued uniform industry training requirements which became mandatory on October 1, 1993; "Training for Safe Transportation of Hazardous Materials" (Docket HM-126F; 57 Fed. Reg. 20944, May 15, 1992). The purpose of this rule is to ensure that hazardous materials employees receive training regarding safe loading, unloading, handling, storing, and transportation of hazardous materials and guidance for dealing with accidents or incidents involving the transportation of hazardous materials. After completion of training, each hazardous materials employer must certify that each hazardous materials employee received training and was tested as appropriate. To achieve these requirements, there are three basic categories of training: (1) general awareness/familiarization training; (2) function-specific training; and (3) safety training related to accident avoidance and personal protection.

- RSPA will publish and distribute over one million copies of the 1993 DOT Emergency Response Guidebook to state and local police and emergency response personnel free of charge. RSPA plans to publish the 1995 DOT Emergency Response Guidebook jointly with Mexico and Canada to ensure the consistency of hazard identification and communication in North America. Editions will be printed in Spanish, French, and English.

- USCG has just released the latest edition of its two-volume Chemical Hazards Response Information System (CHRIS) on hazardous chemicals. The system contains descriptive information and technical data concerning 1,250 of the most dangerous chemicals being shipped. These data are vital to fire departments, hazardous materials technicians and cleanup crews when spills occur, and especially useful for bulk shipments.

- The 15-member agencies of the National Response Team (NRT), through the NRT Training Committee, review hazardous materials response training efforts of member agencies and review Workshops in Emergency Management (WEM) training courses that are jointly produced by FEMA, EPA, and DOT.

- RSPA, through industry, and state enforcement agencies, has produced and distributed a series of hazardous materials transportation training modules. The series is available for industry and enforcement personnel. The "Basic Six" modules include: 1. The Hazardous Materials Table; 2. Shipping Papers; 3. Packaging; 4. Marking and Labeling; 5. Placarding; and 6. Carriers. Modules seven through twelve are under development and include: 7. 1992 Changes to Hazardous Materials Regulations (HMR); 8. Cargo Tanks; 9. Hazardous Substances/Hazardous Wastes; 10. Radioactive Materials; 11. Compressed Gas Cylinders; and 12. Portable Tanks.

- The Hazardous Materials Information Exchange (HMIX) was developed in 1986 to provide a clearinghouse for hazardous materials planning, training, and emergency response information. There are over 25,000 registered users accessing the system. This project is funded jointly by RSPA, FEMA and the United States Air Force.

- FHWA and the State of Missouri are working together to identify and evaluate existing hazardous materials training courses, perform job task analysis, and establish educational objectives to develop a curriculum for the standardized training of state and Federal enforcement personnel. It is anticipated that this effort will result in improved and coordinated enforcement activities, increased compliance, and reduced hazardous materials incidents.

**Regulation, Enforcement, and Training (continued)**

8. **"DOT and the U.S. Fire Administration should jointly conduct a study of costs and means of organizing and delivering training to hazardous materials emergency responders and enforcement officers."**

Summary of NAS Recommendation (8)

NAS recommended DOT and the U.S. Fire Administration should jointly study, and report to Congress on, national requirements and the Federal role in training. NAS recommended that participation of state and local emergency responders participation should be built into the study design and suggested that participation by the U.S. Environmental Protection Agency (EPA) and the National Institute of Environmental Health Sciences would be valuable. Lack of training was cited as a frequent factor in most of the information problems associated with hazardous materials incidents.

DOT Actions on NAS Recommendation (8)

- Under RSPA's implementation of the HMTA Public Sector Training and Planning Grants program, training curriculum guidance for hazardous materials emergency responders has recently been developed by DOT in cooperation with FEMA, EPA, DOE, OSHA, and a team of state and local experts. The national curriculum guidelines are currently under review and will be utilized by states to assist them in qualifying for funding under HMTA grants.

- In Fiscal Year 1993, DOT and DOE entered into a partnership to deliver specialized training to the hazardous materials community. DOE's hazardous materials modular training program will be distributed by the National Safety Council and conducted by RSPA's Transportation Safety Institute. Through this effort, the private sector will be offered "train-the-trainer" courses to ensure a better fundamental understanding of the hazardous materials training packages.

- DOT and the U.S. Fire Administration, pursuant to recommendations made in the congressionally mandated Firefighter Safety Study, are developing in-depth response guidance for emergency response personnel; this will supplement the "initial response" information contained in DOT's Emergency Response Guidebook.

- A Hazardous Materials Awareness Course was developed by RSPA to introduce police, fire, medical and other response personnel to the growing problem of hazardous material transportation emergencies. This course meets the requirements of OSHA's 29 CFR 1910 (1st Level), NFPA's 472 (Competency Level), and DOT's 49 CFR 172.700 (general awareness training). Thousands of industry and emergency response personnel from the Federal, state and local sectors have completed this awareness training course conducted by RSPA's Transportation Safety Institute.

## HAZMAT—INFORMATION REQUIREMENTS

Mr. COLEMAN. The National Academy of Sciences special report also highlighted the inadequacies of RSPA's existing hazardous materials information systems in judging how well hazardous materials information requirements are working. For example, the NAS report indicates that the availability and reliability of statistical data on hazardous materials incidents and on the performance of existing information systems in meeting the needs of hazardous materials responders is limited and that the NAS study committee has to develop its own incident and case study information.

Please indicate specifically how RSPA plans to address these issues, particularly the fact that limited data exists on the performance of the existing hazardous materials information systems.

[The information follows:]

RSPA's Hazardous Materials Information System (HMIS) is intended to identify emerging safety problems, monitor compliance efforts, support training programs, and supply analytical justification for regulatory proposals; it was not designed to encompass public-sector emergency response to hazardous materials incidents. RSPA has proposed extending the hazardous materials incident reporting requirements to include intrastate transporters of hazardous materials. RSPA expects that HMIS's increased universe of data will be available to government agencies and emergency responders for their information and use. Currently, many state and local agencies use the HMIS data in formulating legislative actions, safety plans, and risk analysis.

## INVESTIGATIONS OF VIOLATED REGULATIONS

Mr. COLEMAN. What attention has RSPA given to developing strategies to ensure that violations of hazardous materials regulations noted by emergency responders are promptly investigated by federal or state enforcement officers?

[The information follows:]

The most likely avenue available to emergency responders who wish to notify RSPA about violations of the Hazardous Materials Regulations (HMR) would be to call or write RSPA's Office of Hazardous Materials Safety. Since emergency responders normally respond to transportation accidents or incidents where there is an identified carrier, they usually deal with the DOT modal administration which regulates the carrier. RSPA generally does not have enforcement jurisdiction over carriers, and so emergency responders rarely contact RSPA to report a violation of the HMR. If emergency responders or anyone else wish to file a complaint about violations, RSPA enters the complaint in a computer data file, evaluates it, and takes appropriate follow-up action, either through its own investigation or referral to the appropriate modal administration.

Mr. COLEMAN. Recent audits conducted by the Inspector General reveal that state enforcement of sanctions for motor carrier safety violations and efforts to ensure that out-of-service violations are corrected under the MCSAP program are inconsistent. To what extent is RSPA working with the FHWA Office of Motor Carriers to improve this situation as it applies to hazardous materials transportation violations?

[The information follows:]

RSPA has provided support to the FHWA Office of Motor Carriers since implementation of MCSAP. This support includes review of state Enforcement Plans, uniform training development and delivery, review and comment on proposed out-of-service requirements, and support of uniform sanctions imposed by states for hazardous materials violations.

## SFTA INTERAGENCY TASK FORCE

Mr. COLEMAN. RSPA's priority plan indicates that RSPA established an interagency task force with USDA, HHS and EPA to review existing federal food safety regulations and enforcement activities. What were the findings of this task force and what recommendations were made to the respective agencies by the task force?

[The information follows:]

The purpose of the task force was to develop information to assist RSPA in drafting the regulations indicated in SFTA. The group found that USDA and FDA have authority to inspect vehicles carrying food but did not have authority to require or inspect vehicle cleaning records or prior cargo records. The findings were considered by RSPA in developing the notice of proposed rulemaking. No recommendations were made to RSPA or the other agencies because that was not the purpose of the task force activity.

## ROLLOVER PROTECTION DEVICES

Mr. COLEMAN. What actions has RSPA taken, with the FHWA, to improve the design and performance of rollover protection devices on bulk liquid cargo tanks, as recommended by the NTSB in a 1992 special investigation report on cargo tank rollover protection?

[The information follows:]

As a result of its special investigation report on cargo tank rollover protection in 1992, the National Transportation Safety Board (NTSB) issued numerous safety recommendations to RSPA and FHWA. These recommendations encompassed a broad range of issues, including priority action tiems such as enforcement concerns, acquisition of necessary technical resources, improved accident data collection, and longer term actions such as the improved performance of rollover protection devices. RSPA has assisted FHWA in addressing the accomplishment of those priority action items identified by NTSB.

It is anticipated that a research contract will be issued by FHWA in fiscal year 1995 to address NTSB's safety recommendations to improve the performance of rollover protection devices on bulk liquid cargo tanks.

## HAZMAT—TANK CARS

Mr. COLEMAN. On September 29, 1993, RSPA issued a notice of proposed rulemaking to improve the crashworthiness of tank cars and to restrict the continued use in hazardous materials service of tank cars that no longer meet safety standards. What comments did you receive regarding the proposal? When do you expect to issue a final rule?

[The information follows:]

RSPA received 40 comments to the notice of proposed rulemaking published on October 8, 1993. In addition, about ten persons made presentations at a January 1994 public hearing. The comment period closed March 16, 1994. Commenters generally support most of the proposals but object to requiring higher integrity tank cars for certain materials; in particular, some of the 2.2 (nonflammable) gases, thermally reactive materials and halogenated organic compounds identified by the Environmental Protection Agency. Because of the scope of this project and the extensive technical review necessary, the earliest expected date for issuance of a final rule is late 1995.

Mr. COLEMAN. The NTSB issued recommendations to RSPA and the FRA in 1989 urging both agencies to require that closure fittings on railroad tank cars be designed to maintain their integrity in accidents that are survivable by the rail tank and that tank car manufacturers provide specifications for gaskets and closure fittings on rail tank cars to ensure proper closure. In RSPA's recent notice of proposed rulemaking, RSPA and FRA elected to defer regulatory action on these issues. What was the basis for this determination?

[The information follows:]

RSPA and FRA did not include any proposed regulatory amendments based on National Transportation Safety Board (NTSB) safety recommendations R–89–48 and R–89–49 pending completion of work presently underway at the Association of American Railroads (AAR) Tank Car Committee. NTSB safety recommendation R–89–48 urged RSPA and FRA to amend 49 CFR Part 179 to require closure fittings to maintain their integrity in accidents that are typically survivable by the tank car. We are currently monitoring several items under development by the AAR Tank Car Committee. The Committee is developing requirements to: Manway cover plate materials; top fitting profile; Securement of hinged manways; and Manway bolting materials for corrosives in pressure cars.

NTSB safety recommendation R–89–49 urged RSPA and FRA to amend 49 CFR Part 179 to require designers and manufacturers to determine the specifications for securing closure fittings, such as minimum and maximum torque values for sealing bolted closures and gasket specifications. At DOT's request the AAR Tank Car Committee is developing requirements for the inspection of gaskets and manway cover plates. These requirements, when complete will impose specifications for closure fittings and torque values.

Mr. COLEMAN. What is the status of RSPA's notice of proposed rulemaking on the use of cargo tanks, portable tanks and multi-unit tank car tanks?

[The information follows:]

RSPA issued a notice of proposed rulemaking on May 7, 1993. Barring major obstacles, RSPA could implement a final rule this summer.

## HAZMAT—BULK OILS

Mr. COLEMAN. Please summarize the interim final rule published on June 16, 1993, regarding the transportation of oils packaged in bulk. How are vegetable oils packaged in bulk affected by the interim final rule?

[The information follows:]

Under Docket PC–1, Oil Spill Prevention and Response Plans, RSPA issued a set of requirements applicable to the transportation of oil by rail and highway. These regulations are distinct from requirements specified in the hazardous Materials Regulations (HMR) which address acute hazards that pose threats to life and property.

For bulk packages (i.e., tank cars) containing any oil in a quantity greater than 1,000 barrels (42,000 gallons):

(1) Shippers are subject to requirements pertaining to package integrity, hazard communication, and employee training.

(2) Carriers are subject to requirements pertaining to hazard communication; employee training; package integrity; preparation, maintenance and filing of comprehensive[1] response plans with DOT; and implementation of the spill response plan in event of a discharge.

For bulk packages (i.e., tank cars and tank trucks) having capacity of 3,500 gallons or more, and containing petroleum oil:

(1) Shippers are subject to requirements pertaining to package integrity, hazard communication, and employee training. In addition, if the petroleum oil meets the criteria for a hazardous material, the shipper must comply with all applicable requirements of the HMR.

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[1] A comprehensive response plan is required in instances where the facility (including motor vehicles and rolling stock), because of its location, cold reasonably be expected to cause substantial harm to the environment by discharging into or on the navigable waters, adjoining shorelines, or the exclusive economic zone.

(2) Carriers are subject to requirements pertaining to hazard communication; employee training; package integrity; preparation and maintenance of basic[2] response plans; and implementation of the spill response plan in event of a discharge.

Currently, shippers and carriers are not offering for transportation, or transporting, vegetable oils in bulk packagings in a quantity greater than 42,000 gallons. Therefore, the interim final rule issued on June 16, 1993 does not affect the transportation of vegetable oils.

### HAZMAT ATTENDANCE REQUIREMENTS

Mr. COLEMAN. Please update the subcommittee on RSPA's efforts to revise hazardous materials attendance requirements during the loading/unloading of bulk quantities of hazardous materials in tank cars and cargo tank motor vehicles.

[The information follows:]

RSPA received about 40 comments to the notice of proposed rulemaking. Commenters supported the proposals as an important measure in providing economic relief to the rail and highway industries. RSPA is developing a final rule in coordination with the Federal Railroad Administration and the Federal Highway Administration. Delays have been experienced because of completion of other higher priority rulemakings to improve the transportation of hazardous materials in cargo tank motor vehicles and to improve the crashworthiness of tank cars.

### DOT R&D DISTRIBUTION BY MODE

Mr. COLEMAN. Please provide a breakdown by mode of the $692 million in research and development funding included in the Department's fiscal year 1995 request.

[The information follows:]

[In millions of dollars]

| Administration: | *Budget authority* |
|---|---|
| Federal Highway Administration | $293.385 |
| National Highway Traffic Safety Administration | 24.513 |
| Federal Railroad Administration | 29.150 |
| Federal Transit Administration | 24.206 |
| Federal Aviation Administration | 288.284 |
| U.S. Coast Guard | 19.785 |
| Maritime Administration | 3.627 |
| Research and Special Programs Administration | 3.963 |
| Office of the Secretary | 4.736 |
| Total DOT | 691.649 |

### R&D COORDINATION

Mr. COLEMAN. In your budget you are asking for a $725,000 increase to fully coordinate the Department's technology efforts, enhance Defense technology conversion applications, and conduct several studies on intermodal transportation R&D. Can you specify for each of the three areas above, exactly what projects you are proposing to fund?

[The information follows:]

Funding provided under this program will be divided equally among four interlocking, and mutually supportive, program areas:

#### I. COORDINATION EFFORTS

Focus of RSPA's activities will be on maintaining the newly reinvented R&D Management structure put into place by Secretary Peña. Three areas will be highlighted:

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[2] A basic response plan is intended to assure that carriers are prepared to immediately respond to all oil spills.

Providing the core support for development of the Surface Transportation Research and Development Plan required by the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA).

Conducting analyses at the Volpe National Transportation Systems Center of the structure and funding of the DOT Research and Development program as a whole ("R&D Maps"), for use by the Research and Technology Steering Committee, the Research and Development Coordinating Council, and staff of the Assistant Secretary for Budget and Programs.

Conducting analyses and developing white papers to support operations of the Subcommittees of the Research and Technology Coordinating Council. The Subcommittee structure is now being established, so specific areas are not fully determined. However, human factors and advanced materials will be two areas receiving coverage at a minimum.

### II. DEFENSE CONVERSION

RSPA will continue its efforts to "steer and guide" resources of defense conversion efforts to address transportation problems. The approach being taken is to highlight specific high-potential technologies, and try to have them included in the program solicitations of defense conversion programs and activities of other agencies. Three particular activities have been emphasized:

The Technology Reinvestment Program (TRP) of the Advance Research Projects Agency (ARPA).

The Advanced Technology Program (ATP) of the Department of Commerce's National Institute for Standards and Technology (NIST).

Efforts of Defense and other laboratories to promote industry use of Cooperative Research and Development Agreements (CRADA's).

Work conducted under this item will highlight the technologies and problem areas which may be promising, in the light of ongoing experience with defense conversion. Transportation-related technologies which have already been funded under the TRP include advanced control systems, use of advanced composite materials, dual use sensors, application of robotics to shipbuilding, collision avoidance systems, and vehicle electrical subsystems.

### III. CROSS-CUTTING INTERMODAL TRANSPORTATION RESEARCH AND DEVELOPMENT STUDIES

Analyses conducted under this topic will identify promising technologies with cross modal applicability. The Department's Strategic Plan commits DOT to activities related to the following topics:

Advanced materials; Civil sector applications of the Global Positioning System (GPS); High Speed Ground Transportation Systems (HSGT); Intelligent Vehicle/Highway Systems (IVHS); New Generation Motor Vehicles; and Advanced shipbuilding techniques.

We anticipate that a key focus of this work will be attempting to highlight technologies and subsystems developed in connection with these initiatives, and making sure they are applied in other areas of transportation where possible.

### IV. OUTREACH TO TRANSPORTATION USERS

A new emphasis is being placed on more formally interacting with users prior to the initiation of, and after the conduct of, research. This will assure its relevance, and help identify the most effective ways to document and disseminate the lessons learned. A specific focus of this work will be activities to cultivate improved partnerships between academic researchers and the transportation industry. The principle vehicle for this will be a series of symposia and technical forums targeted at technologies highlighted under the other three areas. The Volpe Center has already hosted a variety of workshops and outreach seminars to solicit input, and we anticipate using these sessions as models.

Mr. COLEMAN. What accomplishments do you expect will result from this investment?

[The information follows:]

RSPA anticipates the following outcomes from the proposed initiatives, if fully funded:

1. Completion of the next Surface Transportation Research and Development Plan, and its availability during subsequent project planning, will promote a more

coherent set of DOT technology development activities, and promote broader application of generic technologies across modal lines.

2. Completion of the "R&D Maps" and supporting activities for the R&T Coordinating Council will promote more effective reviews of DOT budget proposals in future years, and encourage a more strategic outlook in DOT's technology development. This may result in substantial redirections of the program if analytical data indicates problems are being successfully addressed, and dedicated resources can be released to solve other problems.

3. The defense conversion support activity will highlight specific technologies for inclusion in solicitations for the TRP, ATP, and similar efforts, and will also isolate factors limiting their applicability in the civil sector. This will increase the proportion of defense conversion activities dealing with transportation topics. This will also substantially improve the odds for the success of those defense conversion efforts in the transportation sector. Technologies addressed include different kinds of sensor technologies, application of advanced composite materials, alternative kinds of vehicle electric subsystems, innovative human/system interface approaches for training and vehicle control, alternative land vehicle powerplants, and advanced vehicle and facility construction techniques.

4. The cross-modal activities will highlight emerging technologies with broad applicability in the transportation sector, and will isolate subsystems from model technology efforts that might have applicability to other models. For example, some of the control technologies being investigated for Intelligent Vehicle/Highway Systems (IVHS) might have broad applicability to high speed watercraft, trains, and aircraft. Advanced materials being tested for use in highway structures may have potential for use in other transportation guideways. Highlighting of such potentials will lead to economies by promoting broader application of technologies in the other modes.

5. Outreach activities, conducted both in the context of this work and related Technology Sharing, will assure that developing markets for new technologies are reflected in the planning for DOT R&D efforts. They will assure that the results of completed research are being made available to users in a form which they can apply. One emphasis is developing closer partnership between academics conducting research for DOT and the private sector.

## INTERMODAL R&D

Mr. COLEMAN. The Secretary's Office of Intermodalism also has a mandate to foster intermodal R&D. What is RSPA adding that the Office of Intermodalism is not?

[The information follows:]

According to section 5002 of the Intermodal Surface Transportation Efficiency Act of 1991, the Director of the Office of Intermodalism is "responsible for coordinating Federal research on intermodal transportation in accordance with the plan developed pursuant to section 6009(b)(2) of this act and for carrying out additional research needs identified by the Director." The document referred to is the Surface Transportation Research and Development Plan, which RSPA develops from inputs provided by the entire Department.

RSPA works with the Office of Intermodalism to assure that problems "between" modal elements are addressed to assure seamless passenger and freight transportation trips. In addition, RSPA attempts to promote application of technologies developed to address intermodal issues within the programs of the individual modes. RSPA thus facilitates the activities of the Office of Intermodalism, and promotes technology application throughout DOT, regardless of the original purposes it was developed for.

## UTC PROGRAM—EDUCATION MISSION

Mr. COLEMAN. The University Transportation Centers Program also has an educational mission, as do other programs within the Department, such as, the Federal Highway Administration's Eisenhower Research Fellowship program. How do you coordinate your efforts with those of the Federal Highway Administration to ensure, one, that the education being provided is targeted to key transportation areas where there is a need for trained individuals, and two, that there is no overlap in student support from the programs?

[The information follows:]

The educational mission of the University Transportation Centers (UTC) Program differs greatly from that of the Federal Highway Administration's Eisenhower Research Fellowship program. Eisenhower Grants for Research Fellowships are intended to provide talented students with the opportunity to conduct research on important transportation topics at Department of Transportation facilities. As such, they consist of awards to individual students. The UTC Program awards grants to individual universities to establish and conduct a focused program of education, research and technology transfer activities based on the stated theme of the particular Center. To fulfill the education mission of the UTC Program, a Center may engage in any of a wide range of activities including, but not limited to: development of new or expanded academic curricula; offering of new transportation-related degree programs; introduction of interdisciplinary programs on transportation issues; financial support for promising students from groups that are underrepresented in the transportation community; research fellowships for talented graduate students; and development of transportation-related modules for pre-college curricula to increase the number of young people who are prepared to pursue transportation degrees in college.

The educational programs funded by UTC grants are not training programs. They are academic programs which will prepare their graduates for careers in transportation. Future training needs of those graduates will necessarily reflect their choice of specialization: education, research, manufacture, operation, management or regulation. Since the UTC graduates have experienced great success in obtaining positions in all of those fields, their academic preparation would appear to meet current needs. Furthermore, each Center's education program is part of an annual strategic plan that is reviewed by RSPA and representatives of the two funding sponsors, FHWA and the Federal Transit Administration. On the rare occasion when RSPA or one of its modal sponsors has expressed reservations as to the focus of any Center's education program, the Center has modified its plan to address those concerns.

The only "overlap in student support" from the UTC and Eisenhower Fellowship Programs is the extent to which the University Transportation Centers encourage their students to apply for the Eisenhower fellowships in order to effectively increase the size of their Center programs. Having a student win an Eisenhower Grant is considered a great coup, both as an endorsement of that university's students and as a means to support transportation students with funding from funds that do not have to be matched dollar-for-dollar, as is the case with UTC funding. For that reason, RSPA has not found it necessary to coordinate each Center's student funding decisions with the FWHA.

Mr. COLEMAN. During the subcommittee's hearings last year, the Acting RSPA Administrator was asked if she could provide an assessment of whether the Department's educational programs are necessary to train people to maintain the national network of transportation. She could not, but said that it would be a worthwhile review and it would be appropriate for RSPA to launch such a review. Has RSPA conducted such a review since last year or, if not, does it plan to conduct such a review?

[The information follows:]

In the past year, RSPA has examined many issues relating to its portion of the Department's education programs. However, RSPA has not initiated a study of whether such programs are necessary to train people to maintain the national network of transportation. Rather than conducting such a study on its own, RSPA is participating in the broad examination of these issues that is being undertaken by the Committee on Transportation Education and Training of the Transportation Research Board.

Mr. COLEMAN. Has such an assessment been made by any other agency within the Department or by some outside organization?

[The information follows:]

During the past year, there have been several studies touching upon the Department's educational programs. None, however, has addressed the specific question of whether the Department's education programs do, or should, train people to maintain the national network of transportation.

## UTC CLEARINGHOUSE

Mr. COLEMAN. I understand that for the past several years you have been trying to establish, at one of your University Transportation Centers, Penn State University, a central clearinghouse for university-based research. Also, the Intermodal Surface Transportation Efficiency Act of 1991 directed the Secretary of Transportation to establish and operate such a clearinghouse.

This effort is still not complete and RSPA has contracted with the Volpe Center to help develop the clearinghouse.

What problems are causing the delay in implementing the clearinghouse?

[The information follows:]

A University Transportation Centers clearinghouse has been in operation at Penn State University since 1990, when the ten regional centers began contributing funds from their UTC grants to support it. This clearinghouse was situated at Penn State by mutual agreement of the centers, and its purpose was and continues to be the support of common coordination activities among the several centers. The ISTEA bill institutionalized this informal coalition of the centers by specifically mandating a clearinghouse, thus allowing RSPA to directly fund clearinghouse operations without necessitating each center to draw down money from its UTC grant.

With the newly available ISTEA funding, clearinghouse activities grew to include: 1) maintaining a paper-copy library of all research reports issued under the UTC program and distributing the reports upon request, 2) planning and chairing semiannual meetings of the center directors, and 3) preparing printed and visual materials on the UTC program for promotional brochures and trade show exhibits. In response to the ISTEA's direction that the clearinghouse should connect the centers with the transportation industry, RSPA and Penn State agreed to extend the clearinghouse activities further by developing an electronic bulletin board and research data base.

It is true that the electronic portion of the UTC clearinghouse is not yet fully operational, and this is due primarily to the departure of a key technical staff member at a crucial point in the system's development. RSPA's intention now is to pull back the electronic functions of the clearinghouse under its own management, with technical assistance from the Volpe Center or some such source to be determined. Several factors drove this decision: first, staffing problems should not be allowed to further delay the system's implementation; second, Penn State should not be seen as having a bidding advantage in this year's UTC program recompetition because of the electronic clearinghouse; and, third, the electronic data base could potentially serve broader functions within USDOT if it were operated by a USDOT entity.

Mr. COLEMAN. How much have you invested in Penn State's efforts to develop the clearinghouse?

[The information follows:]

Prior to the ISTEA funding, each Center contributed $5,000 a year to Penn State, for a total of $50,000, to perform the coordination functions described in the previous question. When the clearinghouse mandate came with the ISTEA, RSPA awarded Penn State $150,000 in each of the years 1992 and 1993 to continue the previously established $50,000-level of coordination activities and additionally to establish the electronic bulletin board and data base. Because of the withdrawal of the electronic system from Penn State, and because a sufficient balance remains in clearinghouse funds to operate the conference support, public information, and reference library functions for another year, no funds are expected to be awarded for this purpose in 1994.

Mr. COLEMAN. How much are you planning to spend at Volpe to help develop the clearinghouse?

[The information follows:]

Staff from the UTC program office and the Volpe Center are currently developing the statement of work for the proposed tasks on the electronic clearinghouse functions, so no cost figures are yet available. As technical staff at Volpe believe that the computer equipment and software purchased by Penn State for the electronic bulletin board and data base continue to be viable, we do not anticipate that the project will include equipment costs. Because Penn State's system is considered viable, Volpe will first supply technical staff who can quickly and efficiently bring the existing system on line and will then investigate options for making the data base more widely available to the public through data sharing with, for example, the Transportation Research Board's TRIS network, which has requested this information.

Mr. COLEMAN. What plans do you have to recover any of the investment made to the Penn State University Transportation Center?

[The information follows:]

The problems Penn State has experienced in getting the clearinghouse electronic systems on line have resulted in lost time, rather than lost money. We expect a full transfer of all equipment purchased with USDOT funds for the electronic clearinghouse from Penn State once the agreement with Volpe is finalized. Penn State is continuing to maintain the information in the research data base, all of which we expect will likewise be transferred to RSPA, thus Penn State's staff time in this area will still be beneficial to the ultimate operation of the electronic clearinghouse.

## UTC—R&D VALUE

Mr. COLEMAN. How is the work of the university transportation centers and research institutes integrated within the Department's overall research and development priorities?

[The information follows:]

The University Transportation Centers and the University Research Institutes play different roles in the Department's overall research program.

The University Transportation Centers (Centers) conduct research projects in support of their respective themes, e.g., Commercial Highway Transportation. In the case of the three national Centers and the six University Research Institutes that were named in the Intermodal Surface Transportation Efficiency Act of 1991, the themes were established by law. The ten regional centers each proposed a distinct Center theme reflecting their respective areas of specialization. The appropriateness of the themes and their relevance to Department of Transportation (DOT) research priorities were carefully considered before being approved by DOT program reviewers.

Each Center and Institute is subject to a wide variety of statutory and programmatic requirements that affect its research options. These include the requirement to obtain matching funds, to address issues of regional concern, e.g., to involve students in research projects, to support the Center's theme, etc. That is why each Center is evaluated on its effectiveness in selecting and reviewing research that rationalizes the many competing priorities: sponsors interest and thematic relevance; modal balance; regional needs and national priorities; basic and applied research; student, faculty and research staff involvement; and project size and complexity. RSPA ensures that each Center is kept apprised of the Department's research priorities as those are articulated through the Department's research and technology coordination process. Similarly, the program liaisons of the funding sponsors ensure that the Centers are kept informed as to the more specific research priorities of those operating administrations.

Mr. COLEMAN. How has the presence of the University Transportation Centers added value for transportation research and education beyond a collection of individual research projects?

[The information follows:]

The presence of a center serves to tie together the three elements of research, education, and technology transfer so that research does move into the hands of users, and students are taught through experience as well as in the classroom. A center provides a more responsive means of addressing questions to a broad spectrum of academic disciplines that can other, more prescriptive funding sources. Several of the centers now operate major research projects or have developed a particular field of expertise which grew out of a fairly small-scale center research project.

Mr. COLEMAN. How has funding for the centers led to different approaches to research than would have occurred in the absence of the centers program?

[The information follows:]

The UTC Program funding allows researchers to examine innovative approaches to research. Because centers have established systems by which projects are selected and funded each year, researchers are able to react more quickly than would be possible without a center to initiate research proposals that address critical problems and needs of a region. In addition, center research projects often act as "seed" efforts that grow into larger, ongoing studies funded by sponsors within a center's region.

Mr. COLEMAN. To what extent are research funds being directed toward problems of regional or national significance?

[The information follows:]

Regionally, the UTC Program's dollar-for-dollar matching fund requirement has been a key mechanism for ensuring that Center research is of immediate and necessary use to the state and local transportation agencies and private organizations that provide the match. Many centers have succeeded in establishing some form of continuous supporting relationship with local sponsors. Nationally, the centers participate fully in national conferences sponsored by such organizations as TRB, AASHTO, APTA, and many others. The UTC Program's two funding agencies, the Federal Transit and Federal Highway Administrations, also oversee and provide guidance to the centers on their agencies' priorities.

Mr. COLEMAN. What methods do the centers use to transfer the results of research projects to potential users?

[The information follows:]

The University Transportation Centers distribute reports, papers, and videotapes describing their research and educational activities, both directly and through the centralized clearinghouse maintained by the Region III Center at the Pennsylvania State University. Faculty and students from the centers speak widely at conferences and workshops. Center researchers publish in referred journals of the transportation field. Most centers offer some form of training or continuing education courses to their local transportation agencies as a way to pass on research results to targeted groups.

One of the distinct technology transfer advantages of the UTC Program is its emphasis on collaboration with regional transportation providers. Matching fund sponsors, who are often the primary users of center research, serve as technical monitors and act as peer reviewers on research projects. At many centers, regional transportation professionals serve on center advisory boards or project selection committees.

## TRANSPORTATION RESEARCH BOARD 1993 UTC STUDY

Mr. COLEMAN. The Transportation Research Board, in its 1993 study entitled "Measuring Quality: A Review Process for the University Transportation Centers" recommended a three-tier review process. The three tiers were: (1) a program-level review to evaluate the collective products of the UTC program; (2) a center-level review to evaluate the performance of individual centers, and (3) a project-level review to assess the quality of individual research projects and courses.

What is RSPA's reaction to the Transportation Research Board's recommendations for a three-tier review process? Is a three-level review process needed?

[The information follows:]

RSPA generally supports TRB's recommendations, and review of the UTC program is already being conducted in a manner consistent with the TRB study. We agree that the three-level review process proposed by TRB is appropriate to the UTC program.

Mr. COLEMAN. How much did RSPA pay the Transportation Research Board to conduct the study?

[The information follows:]

RSPA paid nothing to TRB to conduct its study of the UTC Program review process. Funding was available through a balance remaining from an earlier TRB study of the University Transportation centers that took place in the early years of the UTC Program when it was managed by the Secretary of Transportation's Office of Policy.

## VOLPE CENTER EVALUATION OF UTC PROGRAM

Mr. COLEMAN. Why did RSPA contract with its Volpe National Transportation Systems Center to develop a method to evaluate the UTC Program? How much did the Volpe Center charge to develop this method, and is Volpe's work completed?

[The information follows:]

The primary purpose of RSPA's contract with the Volpe Center was to develop a procedures manual and a reference library of all materials pertaining to grants management for the UTC Program office. The contract consisted of five separate tasks. The Fifth of these tasks was a mechanism to assess the overall effectiveness of the UTC Program, discussing in specific terms how such a concept as TRB's recommended program-level review might be conducted. This task was added to the original office-procedures concept specifically to take advantage of the particular expertise in this area of a member of the Volpe staff who was available at that time. The total amount of the contract for all five tasks was $68,500, but no cost breakdowns were done among the five tasks. Work done under the contract is complete.

Mr. COLEMAN. Would RSPA and/or other Department of Transportation staff be responsible for conducting the three levels of review or would the reviews be contracted out? If the reviews are contracted out, what is the estimated cost for the reviews both by individual review and in total?

[The information follows:]

As the UTC Program is already being reviewed in a manner consistent with TRB's recommendations, there are no plans to contract out.

Mr. COLEMAN. Does RSPA intend to implement the recommended three-tier review process, Volpe's recommended method, or some other review process? How does RSPA intend to use the informational assessments once the reviews are completed?

[The information follows:]

RSPA is already using the type of three-tier review recommended by TRB and supplemented by the Volpe Center report. The information obtained from this review process is being sued to document the level of success in promoting the purpose of the UTC grants.

## GUIDELINES FOR ANNUAL REVIEWS OF UTC'S

Mr. COLEMAN. In RSPA's response to a December 1992 audit by the Inspector General of the University Transportation Centers, RSPA indicated that guidelines for conducting annual reviews of the centers would be issued by June 1993 to ensure that the centers comply with program requirements. Were the guidelines issued and, if so, how do these guidelines address the recommendations of the Transportation Research Board?

[The information follows:]

An initial review process was developed and used for the annual reviews of all centers in the summer of 1993 prior to the continuation of grant funding. Following the issuance of the TRB study in September 1993, the review process was revised to make direct use of TRB's recommendations. This revised review process is currently being used in the 1994 annual reviews.

### COORDINATION OF DOT UNIVERSITY PROGRAMS

Mr. COLEMAN. RSPA's justifications indicate that one of RSPA's accomplishments for fiscal year 1994 include developing closer coordination among the Department's university programs. Why does RSPA believe that it needs to take the lead for improving coordination of university programs within DOT?

[The information follows:]

RSPA's long established role within the Department has been as a coordinator of Department-wide research. Additionally, RSPA manages two major university research programs funded by other operating administrations: the University Transportation Centers (UTC) Program and the University Research Institutes Program. For these reasons, RSPA is uniquely suited for a leadership role in enhancing coordination among the Department's several university programs. The benefits of greater coordination among like programs has been amply demonstrated within the University Transportation Centers program. Doing the same at a Departmental level would yield the same benefits. Within the Department, university program managers could learn from each other what innovative management approaches has proved effective and whether similar work was being supported under different programs. This knowledge could be passed on to research program managers within both the Department and the academic community, thereby expanding the potential for creative synergy.

Mr. COLEMAN. How many university programs does DOT have and what is the annual cost of these programs?

[The information follows:]

RSPA does not have access to any comprehensive Departmental listing of university programs. To develop such an enumerated list of the Department's university programs would require a fixed definition of the terms of reference. A recent General Accounting Office (GAO) audit of the Department's "university programs" defined the term to include very direct and indirect relationship between the Department and an institution of higher learning. This broad definition encompassed grants, contracts and property loans. In contrast to that, an ongoing study of Department's "university programs" which was chartered by the Assistant Secretary for Budget and Programs, limited its focus to research activities.

The Department participates in the annual National Science Foundation (NSF) survey of federal support to universities and colleges, which reports obligations by agency and recipient, but not by individual program. In the most recent year for which data has been published, fiscal year 1991, the Department's total obligations to universities and colleges was shown as $45.3 million. Since enactment of the Intermodal Surface Transportation Efficiency Act, this amount has increased by approximately $20 million.

Mr. COLEMAN. What was the result of RSPA's survey of DOT's university programs?

[The information follows:]

Rather than engaging in wasteful duplication of effort, RSPA is awaiting the results of two on-going surveys of the Department's university programs before pursuing initiatives for enhanced intra-Departmental coordination. A soon-to-be-released General Accounting Office Audit Report and an internal study conducted under the auspices of the Assistant Secretary for Budget and Programs are both expected to yield extremely useful data and analyses concerning the Department's broad range of relationships with institutions of higher learning.

Mr. COLEMAN. Please generally describe what occurred during the series of information exchanges that RSPA conducted regarding the university research programs and what resulted from them.

[The information follows:]

While such dialogues take place routinely between individuals involved in managing similar programs, the formal information exchanges have not yet taken place.

RSPA is deferring action on this pending completion of the previously described ongoing surveys of university programs.

## GLOBAL POSITIONING SYSTEM/RADIONAVIGATION

Mr. COLEMAN. What are some of the potential civil uses for the Global Positioning System?

[The information follows:]

The Global Positioning System (GPS), because of its extreme reliability and accuracy, has almost unlimited application potential in air, space, marine, and land navigation as well as surveying, timing, and other non-navigation areas. Applications include, but are not limited to:

Aviation: Oceanic and en route navigation; non-precision and precision all-weather approaches; improved aircraft separation standards; airport surface traffic management.

Maritime and Waterways: Navigation on the high seas; all weather harbor approach navigation; dredging of harbors and waterways; offshore drilling; search and rescue.

Highway and Construction: Intelligent Vehicle-Highway System operation; truck fleet management; robotics for construction; accident location studies.

Railroad and Public Transportation: Railroad and bus fleet management; collision avoidance.

Emergency Response and Environmental Protection: Ambulance, police, & fire department dispatch; hazardous materials tracking.

Surveying, Weather, Scientific, and Space: High precision surveys (centimeter accuracy); weather and upper atmospheric research; space shuttle navigation; monitoring tectonic plates.

GPS is also used in law enforcement, agriculture, forestry, synchronization of telecommunications, and recreation (boating, hiking, sports events).

Mr. COLEMAN. The joint DOD/DOT Task Force on GPS recommended that a joint civil/military management structure replace the Department of Defense's management of the radio navigation system. Please describe the management structure envisioned, describe DOT's role in such a structure, and elaborate on the advantages of such a structure over the current system.

[The information follows:]

The joint management structure recommended by the Joint DOD/DOT Task Force on GPS does not replace the DOD's management of the system. The recommended structure realigns the radionavigation organization within the Department of Transportation to reach parity between the two Departments and establishes a GPS Executive Board chaired by the Assistant Secretary for C3I in DOD and an assistant secretary in DOT (proposed to be the Assistant Secretary for Transportation Policy).

The new structure within DOT places radionavigation policy and planning oversight, including GPS, at the OST level for higher visibility and more effective resolution of GPS issues, that impact all civil users, than is possible with the current structure. The GPS Executive Board will meet to address GPS issues that cannot be resolved between the DOD POS/NAV Executive Committee and DOT's POS/NAV Executive Committee (which will be restructure from the current DOT Navigation Council). No high level means of resolving GPS issues effectively between the two Departments exists in the current DOD/DOT structure.

Mr. COLEMAN. How would input from the private-sector participants who might use radio navigation for transportation and other activities be addressed under the recommended management structure?

[The information follows:]

The joint management structure recommended by the Joint Task Force on GPS includes a GPS Interagency Advisory Council and the current Civil GPS Service Interface Committee (GPSIC) to provide civil input to the joint management structure through the two Departments' POS/NAV Executive Committees. The Interagency Advisory Council would be composed of Federal agency representatives only whereas the GPSIC would include representatives form both the public and private sectors, including international representation.

Mr. COLEMAN. What additional initiatives might be needed to enhance acceptance of GPS by those foreign governments who fear a system under the control of the U.S. Military?

[The information follows:]

The U.S. has already provided, in the Federal Radionavigation Plan (FRP), assurance that civil users worldwide may rely upon the availability of GPS signals and services at specified levels. Only the President could direct that GPS signals be degraded during a dire national emergency. Nevertheless, reservations regarding GPS availability continue to arise in international circles despite assurances provided in FRP policy statements. Additional assurance may be necessary to mitigate foreign concerns. According to the Joint Task Force Report on GPS, one possible assurance is in the form of a Presidential proclamation that GPS–SPS will be provided on a worldwide basis for peaceful purposes.

Some additional options may be to:

Codify GPS policies, published in the FRP, into law.

Propose treaties with interested governments.

Develop memoranda of agreement with international organizations or interested nations.

Mr. COLEMAN. What are some of the other major outstanding policy issues regarding the civil use of GPS that still must be resolved?

[The information follows:]

Besides the issues regarding management of GPS and international acceptance, the Joint Task Force on GPS identified five other core issues for resolution. These issues are:

Funding—How can budgeting and financing be structured to ensure sustainment of GPS services?

Accuracy—How can the accuracy of the GPS Standard Positioning Service be improved to provide operationally and economically effective solutions to existing and potential civil POS/NAV requirements and needs without compromising national security?

Integrity and Availability—How can the integrity and availability of GPS be improved to provide operationally and economically effective solutions to existing and potential future civil requirements and needs without compromising national security?

Regulation of GPS augmentations—To what extent should the Federal Government; 1) centralize development and operation of government-provided GPS argumentations (such as differential GPS); and 2) regulate GPS augmentations developed by U.S. private sector companies or organizations?

Spoofing and jamming—What actions, if any, should be taken to counter the threat of jamming (user receives false information GPS signals?

All of the above issues will be addressed by the new joint DOD/DOT management structure.

At the recommendation of the Joint Task Force on GPS, a study is underway, with participation from DOT, DOD, and DOC that is examining ways to augment (or enhance) GPS to meet the accuracy, integrity and availability needs of all civil user needs. The FAA is currently studying the impact of jamming and spoofing on civil aviation safety.

Mr. COLEMAN. What progress has been made in determining how the costs to operate and maintain GPS will be borne between military and civil users.

[The information follows:]

In the current situation, as described by the Joint Task Force Report on GPS, DOD operates and maintains GPS through appropriated funds, with additional funds provided by DOE for some payloads. Federal civil agencies are responsible for budgeting or providing resources to modify or enhance the capabilities of GPS to meet unique civil requirements.

The Joint Task Force on GPS recommended that the current situation is sufficient to ensure sustainment of GPS services; however, the Joint Task Force also recommended that the new joint DOD/DOT management consider developing a comprehensive legislative proposal for implementation as early as FY97 that would address cost recovery allocation among user groups, provide for expanded cost recovery through indirect fees or contributions, and provide a revolving fund structure to facilitate financial management of GPS.

### JOINT CIVIC/MILITARY CONTROL OF GPS

Mr. COLEMAN. What legislative proposals might be necessary to implement joint civil/military control of GPS?

[The information follows:]

DOD and DOT have demonstrated excellent cooperation in joint radionavigation planning since the INMARSAT Act of 1978 directed that the two Departments work together to produced a comprehensive radionavigation plan that would address both military and civil needs. Consequently DOD and DOT have jointly produced the Federal Radionavigation Plan (FRP) biennially since the first edition in 1980. Since then, several memorandum of agreement between DOD and DOT define cooperation on the civil use of GPS.

Despite excellent cooperation between DOD and DOT to date, the two Departments realized that the current GPS management structure was not adequate to satisfy civil needs; therefore the Joint Task Force on GPS was established to address this issue. We believe that the joint management structure recommended in the Joint Task Force report will meet the needs of civil users while maintaining national security and the warfighting capabilities of GPS. We are confident that this new management structure, given a chance, will succeed, and therefore, do not recommend any legislative proposals to implement joint civil/military control of GPS.

### COORDINATION OF RADIONAVIGATION EFFORTS

Mr. COLEMAN. Both the Coast Guard and FAA have extensive efforts under way in the area of satellites and radio navigation. In RSPA's capacity for coordinating radio navigation efforts, what actions have you undertaken to ensure that these two operating administrations take a unified approach to incorporating this technology into their operations?

[The information follows:]

RSPA initiated several DOT Navigation Council meetings in late 1992 and early 1993 to address the rapidly developing GPS technology and the need for the DOT modal agencies to understand individual programs in an effort to eliminate unnecessary duplication. RSPA also coordinated the Joint DOD/DOT Task Force effort in 1993 to address issues such as joint management of GPS and consolidation of modal agency efforts to implement GPS technology for civil applications. One of the recommendations of the Joint Task Force Report is to conduct a study to determine the optimum national differential GPS network to satisfy all civil needs. This study is currently underway, with participation from DOT, DOD, and DOC, and a report is expected by the end of September, 1994.

Mr. COLEMAN. The conference report on the fiscal year 1994 Transportation Appropriations Act directs that the cost of developing the 1994 Federal Radionavigation Plan be shared by the modal administrations based on the Secretary's assessment of the primary civil users of the Global Positioning System. Please indicate how this directive has been implemented and describe the resultant cost-sharing plan.

[The information follows:]

RSPA's understanding is that the $175K appropriated for radionavigation planning and publication of the FRP is core funding, and costs in excess of that amount must be cost shared by the other DOT modal agencies based on primary civil users of GPS. Discussions have been initiated at the working level regarding the percentage each mode should contribute to development of the FRP. The cost-sharing plan is currently being developed, and it is expected that the final plan will put the heaviest burden on the Federal Aviation Administration, the Coast Guard, and the Federal Highway Administration at approximately 75% of the cost, with the remaining 25% being shared between the Maritime Administration, the Federal Transit Administration, the Federal Railroad Administration, and the National Highway Traffic Safety Administration.

Mr. Coleman. In fiscal year 1994, RSPA received $175,000 for the development of the 1994 FRP. Why are you requesting another $200,000 in fiscal year 1995 for publication of the 1994 FRP when these funds were provided in fiscal year 1994?

[The information follows:]

Radionavigation planning is a continuous process and does not stop between publication of each edition of the FRP. Planning begins immediately to develop the next edition of the plan. The 1994 FRP will be published in December, 1994 (FY-1995), and 5,000 copies will be distributed to both the public and private sectors. Some of the $200K requested in FY-1995 may go towards printing and distribution, but the primary use of the $200K is to provide technical support in the process of developing the next edition (1996) of the FRP.

Planning for the 1996 FRP will include necessary interactions with the various user group constituencies. This will involve FRP working group meetings with DOD and joint planning and execution with FAA, Coast Guard, and FHWA of three or more user conferences. The conferences will focus on the identification of user needs to ensure that they will not be compromised by the premature phaseout of some of the land-based radionavigation systems in favor of GPS.

Mr. Coleman. What are the total costs of the DOT liaison positions at the GPS Joint Program Office and at the U.S. Air Force Space Command, and what is RSPA's share of these costs?

[The information follows:]

The current plan is to place one GS-15 level DOT representative each at the GPS Joint Program Office (JPO) and the U.S. Air Force Space Command (AFSPACECOM). The total annual cost estimate is $150K for each position. The cost-sharing scheme for the DOT modal agencies under the proposed new GPS joint management structure has yet to be determined. RSPA, in the past, did cost share equally three ways with the FAA and Coast Guard for a Coast Guard billet at JPO to represent DOT in establishing GPS information requirements of the civil user community. There is now a much broader interest in GPS among the modal agencies and it would be difficult to specify the exact amount that RSPA may be required to contribute. We had assumed under the current radionavigation management structure that our share would be at least $30K per position.

### SMALL BUSINESS INNOVATIVE RESEARCH PROGRAM

Mr. Coleman. How large is the Department's Small Business Innovative Research Program and how does this compare with the previous year?

[The information follows:]

The fiscal year 1993 DOT Small Business Innovative Research Program (SBIR) is $5,142,000 which is an increase of $1,983,000 over the fiscal year 1992 DOT SBIR Program ($3159K).

### SBIR PHASE II PROJECTS

Mr. Coleman. Please provide a list of fiscal year 1993 SBIR phase II projects, a brief explanation of each, and their associated cost.

[The information follows:]

FY 1993 Phase II Awards

| Phase II (Twenty-Four Months Period of Performance)<br>Awardee Name/Address/Topic Number | Topic Number | Contract Value |
|---|---|---|
| Concorr, Inc.<br>609 Carlisle Drive<br>Herndon, VA 22070<br>"Improvement in the Graphite Reference Cell for Reinforced Concrete"<br>(The goal is to optimize the performance of the modified graphite electrodes to the point that they can be successfully used to monitor and control cathodic protection systems on prestressed concrete structures) | 91-FH2 | $299,989 |
| Echelon Industries, Inc. **(M)**<br>20681 E. Truss Court<br>Diamond Bar, CA 91789<br>"Advanced Fare Payment Media for Public Transit"<br>(The objective is to establish, in an actual demonstration, the operational effectiveness of the advanced fare payment media, combined with vehicle location technologies and management reporting systems) | 91-UM1 | $281,000 |
| Exodyne Technologies, Inc.<br>P.O. Box 121008<br>Ft. Worth, TX 76121-1008<br>"Low Cost Guard Rail End Treatment"<br>(The proposed project is based on a comprehensive feasibility demonstration in which the major technical components of the design are tested. The end treatment design operates in the principles of conservation of momentum) | 91-FH4 | $299,853 |
| Science Research Laboratory, Inc. **(M)**<br>15 Ward Street<br>Somerville, MA 02143<br>"Detection of Explosive Vapor at the PPT Level"<br>(The goal is to develop a new approach to the detection of explosives vapor based on a laser interferometric calorimetry technique) | 92-FA7 | $272,682 |

Systems Control Technology, Inc. 90-FA4 $276,467
2300 Geng Road
Palo Alto, CA 94303
"Turbine Engine Rotor System
Failure Prediction and Prevention"

(The objective is to produce a demonstration Turbine Engine Diagnostic (TED) system that will extend the prototype system into a large commercial airline scenario)

Sippican, Inc. 91-CG $295,034
7 Barnabas Road
Marion, MA 02738-1499
"Air Deployable Self-Locating
Surface Drifting Buoy"

(A modular drift buoy concept will be the basis for buoy use by a broad range of customers, through an interchangeable position locator, data uplink and power supply modules within the buoy, in combination with a software adaptive microcontroller)

**(M) Denotes Minority and Disadvantaged**

## SBIR RESEARCH TOPICS

Mr. COLEMAN. Please provide a listing, by modal administration or subject area, of SBIR research topics for fiscal year 1994.

[The information follows:]

## OFFICE OF THE SECRETARY

1. Commercial Space Launch Frequency Requirements

## FEDERAL AVIATION ADMINISTRATION

### Aircraft Safety

1. Effectiveness of Fire Retardant Chemicals at Elevated Temperatures
2. Hybrid Fire Extinguishing Concepts
3. Fire Resistant Thermoplastics for Aircraft Cabin Interiors
4. Biosensors for Aircraft Smoke Detection
5. Raman Fiber-Optic Cure Monitoring System for Polymer Composites
6. Nondestructive Inspection (NDI) of Aging Aircraft
7. Improved Life Preservers for Aircraft
8. Improved Emergency Evacuation Slides for Aircraft

### Aviation Security

9. X-Ray Sources
10. Gamma-Ray Detector Materials
11. Gamma-Ray Sources
12. Luggage Materials Database
13. Concepts in Incendiary Detection
14. Effects of X-Rays on Film and Magnetic Recording Material

### Human Factors

15. Assessment of Airman Cognitive Rehearsal on Time to Regain Flight Proficiencies
16. Correlation of Failures on Written/Practical Tests to Potential Involvement in Accidents/Incidents/Violations

## FEDERAL HIGHWAY ADMINISTRATION

### Traffic

1. Integrated Traffic Data Input Software
2. Computerization of Highway Routing Designation for Hazardous Materials
3. On Board Weigh-in-Motion System
4. Vehicle Axle Detectors

### Hydraulics

5. Positioning System

### Intermodal Transportation

6. Comprehensive Intermodal Freight Transportation Visual Database

### Highway Safety

7. Roadway Visibility Sensor

## FEDERAL TRANSIT ADMINISTRATION

1. Geographic Information System (GIS) Transit Applications
2. Computerized Applications for Transit Operations and Scheduling
3. Applications of Bar Coding Technology to Transit
4. Transit System Computer Simulation Models

## MARITIME ADMINISTRATION

1. Advanced Ship Technology and Intermodal Operations

## NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

### Crashworthiness

1. Advanced Restraint Systems

### Emergency Medical Services

2. Emergency Medical Services Simulation Model

## FEDERAL RAILROAD ADMINISTRATION (FRA)

1. Determining the Intergrity of Insulation- and Lining-covered Welds of Tank Cars

## VOLPE CENTER—PLANS/DEVELOPMENT

Mr. COLEMAN. Last month, the Department submitted a report on proposals under consideration that would affect the Volpe Center's programs and site in Cambridge, Massachusetts. Would you summarize for us the four proposals identified in the report?

[The information follows:]

The Volpe National Transportation Systems Center (Volpe Center) is located in Cambridge, Massachusetts on 14.2 acres of land of which only half is intensively utilized. Four options under consideration for future development of the remainder of the site are:

(1) *Affordable housing*—This option, introduced by legislation submitted by Representative Kennedy, calls for the development of low and moderate income housing on the site.

(2) *Transportation and Logistics Training Complex*—To better accommodate the Volpe Center's current level ($7M/FY 93) of training for its sponsors and respond to future demand, the Center is exploring the establishment of an on-site training center.

(3) *Convention Center*—In order to stimulate economic activity, generate taxes and jobs in the East Cambridge area, Cambridge Mayor Kenneth Reeves has proposed the Center as a possible site for a mid-sized convention center.

(4) *International Intermodal Transportation Institute*—UMass President Michael Hooker proposed the establishment of this Institute on the Volpe site to serve as both a focal point for the research and analysis of transportation policy issues as a forum for conferences, seminars and training events in the transportation arena.

Mr. COLEMAN. The report indicates that further planning for the Volpe Center will await the confirmation of a permanent RSPA Administrator. Some options, however, clearly appear to be more feasible than others.

Which options are under active consideration and which options do you believe would most advance the Volpe Center's mission to serve as a national transportation system's resource?

[The information follows:]

During the 100th and 101st Congresses, Representative Kennedy introduced legislation to require the Department of Transportation (DOT) to convey half of the Volpe Center site to the Cambridge Redevelopment Authority for construction of housing and related uses. The Kennedy land conveyance legislation was not introduced in the 102nd Congress, nor has it been introduced in the 103rd Congress. In order to stimulate economic activity, generate tax revenues, and employ neighboring residents, the Mayor of Cambridge proposed the siting of a mid-sized convention center in the East Cambridge area. One possible site mentioned was the Volpe Center. A convention center could offer significant advantages to the Volpe Center in conducting conferences, seminars, and colloquia. In FY 1993, the Volpe Center conducted approximately $7 million of training in such crosscutting areas as global competitiveness, human factors, and the environment. Continued growth in this area is constrained by a fixed personnel ceiling and lack of an appropriate meeting facility. To better accommodate training and to meet future increased demand, the Center has been exploring the establishment of a transportation and logistics training complex on the site. In a letter to Representative Kennedy, Dr. Michael Hooker, President of the University of Massachusetts, proposed the establishment of an "International Intermodal Transportation Institute" on the Volpe Center site that would serve as both a focal point for the research and analysis of major transportation issues and provide a bridge between academia and the public and private sectors. The establishment of either a transportation and logistics training center or the establishment of a joint UMass/Volpe Center transportation institute would be most closely related to the Center's mission.

Mr. COLEMAN. What specific federal objectives should be achieved through additional development of the Volpe Center site?

[The information follows:]

The Volpe Center's role in meeting and anticipating transportation needs of national and international significance continues to evolve. Currently, the transportation community is faced with responding to the requirements of the Intermodal Surface Transportation Efficiency Act of 1992, the Clean Air Act Amendments, Americans with Disabilities Act and other legislation. As a result, much of the land use and transportation system planning decision-making has shifted to the local level. As a federal resource possessing crosscutting transportation expertise, the Volpe Center is ideally positioned to assist the transportation community in addressing these needs. This can be accomplished through outreach and education and through partnerships with industry, academia, and state, local, and international governments.

Mr. COLEMAN. Does the Department have a timetable regarding future development of the Volpe site?

[The information follows:]

No, the Department does not have a specific timetable regarding the future development of the Volpe site. It continues to explore the four options discussed previously and is in the process of developing some additional options. In the meantime, the Volpe Center continues to work with the City of Cambridge and the Cambridge Redevelopment Authority on local land use issues which may impact the future development of the site.

## VOLPE CENTER SITE, PROGRAMS, AND RELATIONSHIPS REPORT

Mr. COLEMAN. Please insert in the record a copy of the report, “The Volpe Center Site, Programs, and Relationships with Neighboring Academic Institutions.”

[The information follows:]

THE SECRETARY OF TRANSPORTATION
WASHINGTON, D.C. 20590

The Honorable Bob Carr
Chairman, Subcommittee on Transportation
and Related Agencies
Committee on Appropriations
U. S. House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

I am pleased to forward to you the Volpe National Transportation Systems Center report on the "Volpe Center Site, Programs, and Relationships with Neighboring Academic Institutions", requested in Senate Report 102-351 that accompanied the Fiscal Year 1993 Department of Transportation Bill.

The Committee Report asked that the Research and Special Programs Administration (RSPA) Administrator provide a report on all planning and proposals under consideration for the property housing the Volpe Center site, along with proposals to change significantly the Volpe Center's programs and the Center's relationship with neighboring academic institutions. The enclosed report reflects externally generated ideas for the future development of the Volpe Center site.

One of my highest priorities is to advance the realization of the full potential of transportation research and development. Given the Volpe Center's basic role in this area, any change to its mission or future development will reflect this priority. For example, the defense conversion initiative is a key opportunity for transportation. In the Technology Reinvestment Project, the Department of Transportation is currently working with the Department of Defense, the Department of Commerce, the Department of Energy, the National Aeronautics and Space Administration, and the National Science Foundation on establishing the most effective directions for transportation-related research. The Volpe Center is a key player in that activity.

An identical letter has been sent to Chairman Lautenberg.

Sincerely,

Federico Peña

# The Volpe Center Site, Programs, and Relationships with Neighboring Academic Institutions

Research and Special Programs Administration
U.S. Department of Transportation

John A. Volpe National Transportation Systems Center

Kendall Square, Cambridge, Massachusetts 02142

# The Volpe Center Site, Programs, and Relationships with Neighboring Academic Institutions

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## Attachments

1. "A Plan for the Future of the Volpe National Transportation Systems Center," October 1, 1991.

2. "Summary of Business Planning at the John A. Volpe National Transportation Systems Center," March 25, 1993.

## I. Introduction

This report responds to language in the Senate Appropriations Committee Report 102-351 accompanying P.L. 102-388, the *Department of Transportation and Related Agencies Appropriations Act, 1993.* This document describes the Volpe Center's growing relationship with academia and its outreach to the transportation community, site development options that have or are currently being explored, and the Center's next steps in determining its future.

### Request from Congress

The Senate Appropriations Committee requested this information through the following report language:

> *In testimony before the Committee, RSPA officials pointed out that much planning is underway to further develop the role of the Volpe National Transportation Systems Center, as well as the property housing the center. Proposals under consideration include the establishment of a Department of Transportation university and the Volpe Center/Massachusetts Institute of Technology (MIT) Human Factors Research Center. The Committee requests that the RSPA Administrator provide a report to the Committee not later than March 1, 1993, on all planning and proposals under consideration for the property housing the Volpe Transportation Systems Center site, as well as all proposals to significantly change the Volpe Center's programs and the center's relationship with neighboring academic institutions. (S. Rept. 102-351, p. 177)*

In a previous request (S. Rept. 101-398, p. 144), the Senate Appropriations Committee asked for a plan detailing how the Volpe Center would seek to become a more comprehensive and effective national transportation R&D center. That request was fulfilled by "Plan for the Future of the Volpe National Transportation Systems Center, " provided to the Committee October 1, 1991 (Attachment 1). This latest report provides an update of plans and proposals for the Volpe Center site presented in the earlier *"Plan for the Future"*.

## II. Enhancing the Center's Mission Through Program Planning

**The Volpe Center will continue to enhance its current programs and relationships with its clients in the Department and other federal agencies, as well as academic institutions. In this regard, the Center's business planning is guided by four foundational goals:**

- **Attain the highest level of quality and responsiveness in support of our clients' needs.**

- Develop project partnerships into long-term strategic partnerships with clients.
- Anticipate transportation issues and trends and continuously adjust the Center's capabilities to respond to changing needs.
- Provide an effective bridge between the public and private sectors.

(These goals are discussed in detail in Attachment 2, a summary of business planning at the Volpe Center.)

The Volpe Center's *"Plan for the Future"* provides a blueprint for the Center's evolving role in meeting and anticipating transportation challenges of national and international significance. The following excerpt from the plan references the Center's attention to the priority of helping states and localities address new and/or mounting transportation issues.

> *Stewardship of the nation's transportation infrastructure is shared increasingly with state, local, and regional governments. At the same time, these entities must respond to transportation-related provisions of the Clean Air Act, Americans with Disabilities Act, and other legislation. In so doing, they will have to deal with intermodal issues and impacts of a technical complexity never before faced. Developing effective partnerships with the private sector and implementing innovative means of financing also will call for further expertise. To address these emerging needs, the Center will work in conjunction with regional UMTA (FTA), FHWA, and other DOT offices to provide state and local authorities with support on intermodal and technical issues. ("A Plan for the Future, " p. 16, October 1, 1991)*

Consistent with this understanding, the Center's planning is being modified to further the goals of reaching out to the transportation community and enhancing transportation training and education. These efforts will include not only FTA and FHWA but also the Office of the Secretary and all the other DOT administrations. These modifications will better equip the transportation community, particularly states and localities, with the tools and understanding necessary to address such transcending issues as the effects of different modes of transportation on the environment, and accessibility to transportation.

As noted above, recent landmark legislation, including the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), has shifted much of the land use and transportation system planning decision-making to the local level. Consequently, metropolitan planning organizations (MPOs) must expand their knowledge base to make fully informed decisions relating to resource allocation and major capital investment. By focusing a larger portion of its expertise on information display technology and multimodal transportation training, the Volpe Center can play a central role in this endeavor.

These programs planning modifications also complement the innovative initiatives articulated by the Administration in the President's technology policy, as well as the new course charted for the recently renamed Advanced Research Projects Agency (formerly the Defense Advanced Research Projects Agency).

For instance, *"Technology for America's Economic Growth, A New Direction to Build Economic Strength"* (February 1993) discusses the creation of a national network of manufacturing extension centers, which are to be testing and training facilities financed through matching state and local funds. The essence of this concept, which, was proven successful by the agricultural extension agent program, could also be applied to greatly assist in meeting the burgeoning transportation training demands anticipated by MPOs nationwide as they attempt to grapple with the aforementioned major new legislative mandates. The Volpe Center's partnerships with academic institutions and its training expertise could effectively serve as the foundation for a model transportation training institute, the essence of which could then be duplicated for local/regional government use nationwide. (This concept is also discussed in Section IV.)

## III. Volpe Center Relationship with Neighboring Academic Institutions

Trends toward increased emphasis on applied research and stronger interaction with user communities imply a very natural and mutually beneficial relationship between the Volpe Center and various academic institutions. The Volpe Center has, since its inception, served as a bridge between the world of advanced technologies and the entire transportation community: shippers, passengers, transportation companies and authorities, and public transportation agencies. As a byproduct of 23 years of performing highly varied projects, it has a rich understanding of the complex relationship between advanced technologies and the transportation needs of users and the marketplace.

The Center has long enjoyed close relationships with local universities, based on a meshing of project needs and the special expertise of those institutions. These have recently expanded into collaborative activities going well beyond direct technical support, including:

- Establishment of a national facility at the Volpe Center for the conduct of studies of human-machine interactions in the context of transportation system design and operation has been recently initiated at the Center by means of a Cooperative Research and Development Agreement (CRDA) between the Volpe Center and the Massachusetts Institute of Technology (MIT).

- Cosponsorship of a four-day conference with MIT in August 1992, to introduce U.S. industry to business opportunities in Eastern Europe and the newly-independent states that formerly comprised the Soviet Union. The meeting was attended not only by many business representatives, but by several ministers of transport and other governmental officials from Eastern Europe, Russia and Ukraine, and also by the World Bank and several federal agencies.

- Participation in the Tufts University Capstone Project study on the development of a risk-based methodology to prioritize environmental activities and projects for the U.S. Coast Guard. This successful cooperative effort has resulted in development of a computer routine that will assist the Coast Guard, in establishing the priorities for environmental remediation at their facilities.

- Presentation several times a year of a three-day training course for the Department's career Senior Executive Service managers, "Transportation Issues Seminar." The Volpe Center serves as the liaison and coordinator; the program draws upon the resources of MIT and the Harvard University John F. Kennedy School of Government. The Center is also working with the Kennedy School on projects concerning the implementation of the Clean Air Act Amendments, as well as a management review of Intelligent Vehicle Highway Systems (IVHS).

- Operation of the Center's very active cooperative education program, involving both undergraduate and graduate students from across the nation. Locally, there are 70 students from 15 colleges and universities participating in this program.

Activities such as these have made clear that the government and the academic world derive great mutual value from joint undertakings which broaden the knowledge and perspective of all parties. Prior Volpe Center collaboration has been predominantly with private universities having a major research component. However, in order to facilitate the critical role of educating professionals who will provide the staff and management of future transportation systems, it is deemed important to work with large public universities that draw from the entire population and provide a large fraction of the graduating labor force. Realizing these and other issues of mutual interest led to conversations with the president of the University of Massachusetts (UMass), Dr. Michael K. Hooker. This, in turn, led to the Umass concept described below (option 4), including joint research, conferences, training, and interaction with the transportation community.

## IV. Considering Land Use Options to Further the Center's Mission

The Volpe Center plays a unique role in meeting and anticipating national transportation needs. While a well-utilized component of the Department of Transportation, the Volpe Center responds to a need throughout the government for expertise in transportation and logistics. This breadth of experience helps to prevent duplication of effort and resources, fosters technology transfer to and from DOT, encourages synergy across agency boundaries, and enhances the government's institutional memory in transportation. In addition, the Center's quick response capability enables decision-makers to set priorities and determine policy with greater efficiency. These factors illustrate a vision of the Center that is focused by four key crosscutting strengths:

1. Outreach to the transportation community and bridging with other agencies,
2. "Front end" planning and policy support,
3. Education and training, and
4. Helping our customers to be "smart buyers."

To continue to pursue this vision, the Volpe Center has been and continues to explore options for the further development of portions of its real estate.

The Volpe Center comprises six buildings located on fourteen acres in Kendall Square, Cambridge, Massachusetts. At the present time, it houses approximately 1,100 federal and contract workers in buildings that occupy about one-half of the site. The Center adjoins the campus of the Massachusetts Institute of Technology and is situated in a community of leading high-technology firms including the Lotus Development, Biogen, and Polaroid Corporations.

The Center's buildings were originally constructed by the National Aeronautics and Space Administration, on 14.3 acres of land obtained from the Cambridge Redevelopment Authority (CRA), to be the nucleus of an electronics research laboratory. NASA discontinued this activity in 1970 and the site and facilities were transferred to the newly-formed Department of Transportation to house the present systems research capability. Since 1970, the Kendall Square area has undergone large scale private development as many new engineering, computer, and biological research and development organizations have established facilities. In addition, the redevelopment authority has coordinated the establishment of hotel and retail businesses to support the technical enterprises.

Over the past two years, the Volpe Center has had increasing interaction with the City of Cambridge as a result of land use issues relating to rezoning proposals, affordable housing issues, and proposed extensions to the Cambridge Urban Renewal Plan. And, in the fall of 1992, the Center began a community outreach educational program, known as the Volpe TEAM (Tutoring, Educating, and Mentoring) Effort. Over ten percent of Volpe Center staff are currently involved in this volunteer program, which provides assistance to Cambridge public school students through tutoring and mentoring, and to adults through an adult literacy program. Last year, the Center was visited by the Mayor of Cambridge, city council members, the Assistant Superintendent for Schools, the Executive Director of the Cambridge Redevelopment Authority, school board members and neighborhood activists. These visits provided an opportunity to acquaint Cambridge citizens with the mission of the Center and for the Center to become a more integral part of the community.

There have been a number of proposals for use of the remaining seven acres, which are less intensively developed and currently used for the Multimodal Transportation Human Factors Research Laboratory, parking, and shipping and receiving. Representative Joseph P.

Kennedy II had proposed that the site be used for the construction of affordable housing to serve the East Cambridge community. Former Secretary Skinner, during a visit to the Center in September of 1989, proposed that the Center be developed into a technology park through public/private partnerships. The Volpe Center has explored the possibility of developing a transportation and logistics training complex. The Mayor of Cambridge has proposed that the site be used for a convention center that would serve the needs of the area's high-tech industries, including the Volpe Center's expanding outreach program. More recently, UMass President Hooker has proposed the establishment of an *International Intermodal Transportation Institute*. The Institute, to be located on a portion of the Center's site, would be operated by the University, in collaboration with the Volpe Center. Some of these proposals, summarized below, represent an evolution in exploring potential further development of the site.

### (1) Affordable Housing on the Volpe Site

During the 100th and 101st Congresses, Representative Kennedy introduced legislation to require the Department of Transportation to convey more than half of the Volpe Center site to the Cambridge Redevelopment Authority for construction of housing and related uses, including commercial development, and to extend CRA controls on the remaining property to the year 2000. The legislation was referred to the House Banking, Finance, and Urban Affairs Committee; no hearings were held in either Congress. During the 101st Congress, Former Secretary Skinner submitted a "views letter" to the Committee opposing the legislation.

At the Department's request, language was added to the FY 1991 transportation appropriations bill modifying an earlier prohibition on departmental planning that might alter the Center's federal status. The new language permitted planning for the Center's further development as a federal facility (P.L. 101-516, Sect. 308). In accordance with the lifting of the planning restrictions, Economics Research Associates, a national real estate consulting firm, was commissioned by the Volpe Center to conduct a study of the development potential of the site. Their June, 1991 study, "Volpe National Transportation Systems Center Expansion Analysis" concluded that further long-term development of the site both viable and feasible despite current economic conditions, zoning and environmental/parking considerations. It also stated, "This site ...is not ideal for housing from a locational and land use perspective especially in that housing on the site would likely be an 'island' in a sea of office, industrial, and hotel uses."

The Kennedy land conveyance legislation was not introduced in the 102nd Congress, nor has yet been introduced in the 103rd Congress. The Cambridge City Council, however, has before them a council order requesting the reconveyance of 5.8 acres of land to the Cambridge Redevelopment Authority for the development of affordable housing. In the same order, it is also stated "that the remaining 8.5 acres of land would remain in Federal ownership allowing additional building space and which would permit NTSC to expand its present facilities, to increase its software development capabilities, to develop a training center and to create a national center for new transportation technology and research."

### (2) Transportation and Logistics Training Complex

The Volpe Center provides valued technical training in transportation and logistics to many of its clients. To better accommodate these training services it already provides, and to meet future increased demand, the Center last year began exploring the possibility of establishing a transportation and logistics training complex on the site, making available existing space.

In FY 1993, Center staff conducted approximately $7 million of training for its sponsors. To effectively manage this increasing role in training, the Center created an internal Center Training Users Group (CTUG). CTUG holds monthly meetings during which experts in the training field are brought in as speakers to expand the knowledge base of those involved in training. This area will continue to grow as localities struggle with implementing ISTEA, the Clean Air Act Amendments, and the Americans with Disabilities Act, while contending with other increasingly complex issues regarding the environment.

Last August, the Volpe Center jointly hosted with MIT a seminar on telecommunications, transportation, and the Newly Independent States of the former Soviet Union. In part due to this seminar, it is anticipated that the Minister of Transport of the Russian Federation may request additional support from the Department. Because of its unique intermodal perspective, the Center is well positioned to provide multimodal training in such crosscutting areas as transportation's impact on the environment, human factors, and global competitiveness.

Continued growth in this area is constrained by a fixed personnel ceiling and lack of an appropriate facility. To bridge the need for a facility, planning is underway to convert a portion of Building Two (auditorium and personnel) into a state-of-the-art training center. This will provide a locus for training efforts at the Center. Planning for such a facility is still in exploratory stages.

### (3) Convention Center on the Volpe Site

In keeping with its increasingly closer ties to Cambridge, the Center, in November,1992 and again in March,1993, participated in a forum on the future of East Cambridge. Participants included city government and planning officials, developers, local business representatives, neighborhood activists, and staffers from Representative Kennedy's office. East Cambridge, though intensively developed during the 1980's, lacks the around-the-clock economic activity found in the nearby Central and Harvard Squares. In order to stimulate economic activity beyond the 9-5 workday, generate tax revenues and employ neighboring residents, the Mayor of Cambridge has proposed the siting of a midsize convention center in the East Cambridge area. An article in the Boston Globe stated the following:

> *Cambridge, after rejecting outright a "megaplex" sports stadium and convention center, is pondering whether a "miniplex" would be a better fit. Proposed by Mayor Kenneth Reeves, the idea calls for a small convention center holding up to 2,000 people. Typical of the gatherings that Harvard and MIT generate. A committee of 50 has been named and the city says one possible site is federally owned land behind the US Dept. of Transportation building at Kendall Square. Another could be University Park in Central Square, owned by MIT, where a hotel and convention center has long been proposed.* (Boston Globe, *January 25, 1993)*

### (4) International Intermodal Transportation Institute

In a letter to Representative Kennedy, Dr. Michael Hooker, UMass president, proposed the establishment of an "International Intermodal Transportation Institute" that would serve as both a focal point for the research and analysis of major transportation policy issues, as well as a forum for seminars, conferences, and training events on these topics. Examples of such policy issue topics include the promise of intermodal transportation and obstacles to its expansion, promising technological applications to transportation, the relationship between environmental enhancement and transportation activities, and the contribution of efficient transportation to international competitiveness.

Through the Institute, he proposes that the University would collaborate with Volpe Center staff in such tasks as the following: administering the facility; choosing research topics and undertaking the analytical efforts; developing the curriculum and contents and providing instructors and facilitators for the Institute's conferences, courses, and related events; identifying and coordinating the use of talent from other academic institutions in the region; disseminating the results of these activities in publications and other media; and assisting in technology transfer and information sharing. A long-term contractual arrangement between the Center and the University would formalize the relationship.

Dr. Hooker anticipates that the Institute and its activities would benefit governmental, academic, and private sector organizations throughout the nation by involving them in the exploration of major transportation issues. In addition to these benefits, he estimates that establishing the Institute at the Volpe Center site would also generate about 800 new jobs (200 federal and 600 other) and bring an additional $100 million annually to Massachusetts.

## V. Evaluation of Options and Outlook for the Future

In summarizing these various proposals and their applicability to furthering the Center's mission, it is clear that these four options represent an evolution of potential uses for portions of the Volpe Center site, from relinquishing the land for non-federal transportation purposes (i.e. affordable housing) to the current proposal advocated by the UMass president.

- Reconveyance for Housing: While the City of Cambridge continues its interest in the reconveyance of a portion of land for affordable housing, it recognizes the need and opportunities for economic stimulus on the Volpe Center site.

- Transportation and Logistics Training Complex: This would provide a locus for training efforts at the Center, but is not expected to satisfy future or expanded training needs.

- Cambridge Mayor's Recommendation for Convention Facility: In meeting the Center's aforementioned goals, a convention center would offer significant advantages to the Volpe Center in conducting conferences, seminars, and colloquia. In addition, a convention center would further the Cambridge Mayor's desire to broaden the scope of development at Kendall Square.

- International Intermodal Transportation Institute: This would provide substantial benefits to Center programs, particularly in terms of anticipating transportation issues and providing a bridge among academia and the public and private sectors. The Institute would therefore be fully consistent with the Center's business planning, which includes as a major initiative the concept of an intermodal institute. This Institute could also complement the essence of the convention center option advocated by the Mayor of Cambridge.

The history surrounding the issue of further Volpe Center site development underscores the importance of departmental concurrence and commitment through the policy guidance of the RSPA Administrator and the Secretary of Transportation. Full endorsement and active pursuit of any of these options should be deferred until a permanent RSPA Administrator has been confirmed. He or she, in consultation with the Secretary of Transportation, Members of Congress, the government of the City of Cambridge, and other affected parties, will arrive at a mutually acceptable position.

#

ATTACHMENT 1

# A Plan for the Future of the Volpe National Transportation Systems Center

Prepared in Response to a Request
from the
U.S. Senate Appropriations Committee

October 1, 1991

Research and Special Programs Administration
United States Department of Transportation

John A. Volpe National Transportation Systems Center
Kendall Square, Cambridge, Massachusetts 02142

Working with or through FHWA, UMTA, and other DOT clients, the Center would broaden its mission to support local decision making on intermodal issues. It would develop and disseminate the analytic tools and "know-how" needed to deal with local transportation issues arising from recent amendments to the Clean Air Act and from other Federal legislation. In response to increasing globalization of the economy, the Center also would help to meet U.S. Government requirements for analytic and other support with regard to the performance of the international transportation system.

## Meeting the Challenges

In recognition of its importance within the transportation community, the Center (formerly called the Transportation Systems Center) recently was renamed the Volpe National Transportation Systems Center. To fulfill its role as the Department's national center of excellence in transportation and logistics, the Center will foster its technical capabilities in strategic intermodal thinking and, in view of the interdependence of transportation and other national concerns, will adopt an enhanced global and integrated approach to transportation problem solving for its clients. Accomplishing these objectives will require the following management initiatives:

### *Human Resources*

The Center's staff is the critical element in extending the Volpe Center's work to emerging issue areas and in responding to the needs of new clients. The Volpe Center has proposed to strengthen its response to rapidly changing requirements for its technical capability and expertise by augmenting its Federal staff with limited-term employees. Increasing and decreasing the number and the skills of temporary appointments will provide the Center with the flexibility it needs to respond to rapidly changing requirements for technical expertise.

As a Federal employer, the Volpe Center faces severe competition from the private sector for accomplished candidates; at the same time, its work force is aging, with many employees becoming eligible for retirement. The Center has identified the following actions for retaining, retraining, and recruiting personnel:

- Apply provisions of the recently enacted Federal Pay Comparability Act, many of which are subject to decision by the Office of Personnel Management or by the Secretary.
- Establish multiple career paths for engineers and other specialists.

- Continue development of the Center's Gateway to Careers in Transportation Program to attract new professional talent to the transportation community.
- Institute a program for recruiting distinguished transportation researchers interested in limited-term appointments.
- Strengthen managers' diversity training.
- Extend the co-op program to colleges across the country.

### *Strengthened Management Processes*

Intermodalism is the most significant aspect of the new work that will face the Center as it provides support to DOT operating administrations and to other clients over the next 5 years. The Center will need to bring together the wide-ranging experiences of its staff to transfer knowledge on issues that are common to more than one client, to facilitate synergistic solutions to problems confronting different modes of transportation, and to provide its clients with a future perspective on individual modes as they will relate to the evolving transportation system as a whole. To meet these needs, the Center will refine its management processes to foster the transfer of knowledge across its many modal programmatic activities. Responding to the growing awareness of intermodal issues (not only those involving interconnections of two or more modes, but also those dealing with trade-offs among modes where several compete), the Center will institute new management processes to become a more effective agent of intermodal information exchange among all stakeholders in the transportation system.

### *Site Management*

Secretary Skinner has charged the RSPA Administrator with assessing the feasibility of converting the DOT-owned land surrounding the current facility into a transportation technology park in which the Center would serve as the core of a complex of public and private organizations engaged in transportation and logistics research. In response to this request, the Center has initiated -- within the statutory constraints on planning activities to change the Federal status -- the preparation of a site development plan that would include office space for additional on-site contractor staff and specialized transportation capabilities.

- Increasing emphasis will be placed on assuring that public agencies and private businesses work harmoniously together.

Forces for Change

Dramatic changes--technological, institutional, social and economic--have come rapidly in recent years. and are creating strong pressures for new transportation infrastructure and services. More directly. Federal legislation in 1990 and 1991 has assigned specific roles and responsibilities to the Department that will require new or expanded support from the Volpe Center in a variety of areas. Legislation and issues most strongly influencing future demand for Volpe Center services are:

- Surface Transportation Legislation

  Concern over the U.S. surface transportation infrastructure is reflected in ISTEA with its major thrusts for intermodalism, decentralized planning, improved air quality and energy efficiency, high mobility, and effective use of advanced technology. It also carries a growing role for state and local agencies and the private sector.

- Environmental Legislation and Societal Concerns

  National environmental concerns are reflected in ISTEA, the Clean Air Act Amendments, the Oil Pollution Act and the Aviation Noise Policy Act. Explicit new Departmental responsibilities include cleanup of DOT operational sites and will increase the environmental support requirements of all parts of the Department. State and local agencies will need guidance and technical assistance.

- Public and Private Financial Constraints

  Financial constraint will be a significant factor in dealing with infrastructure requirements and decisions. Cost-effectiveness studies, benefits assessments, risk analyses and the identification of new financing mechanisms will be important parts of Center work.

- New Technologies

  Advanced Technologies such as maglev, tiltrotor aircraft, electric cars, IVHS, and satellite-based communications and navigation could offer significant transportation benefits, but the practical value of these and other innovations must be objectively assessed, and the appropriate roles of government and the private sector in bringing about technical advances will need to be examined carefully. In addition, new safety issues inherently arise as new technologies are considered for deployment.

  Dramatic advances in the functional capabilities of information and communications technologies are having a major effect on the use, performance and operation of transportation systems. The Center will have a key role in understanding and shaping these changes.

- Global Economic and Political Changes

  Rapid changes are through globalization of the economy, dramatic political shifts, and changing requirements for military logistics. All have profound meaning for the transportation system and DOT as it seeks to fulfill its mission for fostering fast, safe, efficient and convenient transportation. Competitiveness of US industry and ability to fulfill redefined military missions are dependent upon changes in the transportation system.

## Areas of Planned of Programmatic Emphasis and Change

Each Center market area has been examined on the basis of anticipated client and national associated with recent legislation and other forces for change. This analysis yields the following guidelines as a framework for the Center's development during the next three years:

- Increase activities relating to the interaction of transportation and environmental quality.
- Emphasize surface transportation infrastructure and satellite-based communication, navigation and surveillance applications, particularly in connection with application of innovative technology and management practices.
- Expand strategic "front-end" planning activities, based on a broad intermodal, system-level perspective, both as independent projects and integral elements in broader programs.
- Focus safety and security efforts on the potential performance of advanced transportation technologies and on system-level planning and assessment.
- Develop cooperative programs and technology sharing with state and local agencies, particularly in the infrastructure and environmental market areas.

## Major Institutional Initiatives

The Volpe Center has always been actively involved in technology sharing and dissemination, extensive interactions with the transportation community, and the collection and use of data related to all aspects of transportation. It is now appropriate to formalize and expand these efforts into a continuing effort on a significantly larger scale. Initiatives to institutionalize these cross-cutting Volpe Center functions, which basically lie outside the programmatic framework described above, are central to this business plan. Four major non-programmatic initiatives include:

- Enhancement of the training and development of transportation and logistics professionals throughout the transportation community.
- Expansion of outreach activities to the transportation and related communities.
- Renewed emphasis on transfer of technology and cooperation with the private sector to facilitate advances in productivity and national competitiveness.
- Active participation in Departmental efforts to improve the collection, analysis and dissemination of transportation data and statistics.

## Ongoing Process Improvements

- Workforce Enhancement

  In an environment of continuing change it is critical that the Center be adept at anticipating needs and forming new teams in emerging areas of importance, while dissolving existing teams as the needs which generated them are met. Given the cross-cutting nature of many of the Center's tasks, teams will include individuals having a wide variety of knowledge, skills and experience. In addition to facilitating rapid and effective response to client needs, this approach will maximize the empowerment of each team member.

  Innovative human resource management and greater empowerment of staff will thus be keys to steadily improving overall organizational response and productivity. Special attention will be given to enhancing internal communications among organizations, across the Center's technical community and between management and the working level. Continuing review of Volpe Center administrative and managerial procedures and infrastructure will be the basis for efficiency of virtually all internal actions.

- Enhanced External Support

  Maintenance of Federal technical direction and expertise is essential. Some of the Center's work involves an inherently Federal role and is not suitable to substantial contractor participation. Wherever possible, emphasis will be placed on creating true Federal-contractor teams, which will facilitate sharing of information, integration of efforts, and overall project management. A special effort will be made to provide training and other support to assist Federal personnel in refining their skills at managing these heterogeneous teams.

- Ongoing Strategic Planning

  The forces affecting Volpe Center clients during the next three years and the areas in which the Center can work most effectively can be discerned relatively clearly. However, in order to respond effectively to a shifting transportation environment, continuing effort will be devoted to assessing the importance and durability of current trends and anticipating future developments. An ongoing strategic planning activity, closely linked to planning activities for clients, will provide a foundation for decisions affecting the Center's staffing, training, contracting, and resource allocation.

ATTACHMENT 2

# SUMMARY OF BUSINESS PLANNING AT THE JOHN A. VOLPE NATIONAL TRANSPORTATION SYSTEMS CENTER

## Purpose

The following material presents current results of business planning activities at the Volpe National Transportation Systems Center. It describes the markets the Center serves and is expected to serve in the next three years, the national and global trends and forces that affect the needs of its clients and therefore define the work anticipated in the mid-1990's, and the steps which will be taken by the Center to be able to respond effectively and to develop strategic partnerships with its clients.

## Volpe Center Goals

This Business Plan of the Volpe National Transportation Systems Center is shaped by and directed toward four overall goals:

- Attain the highest level of quality and responsiveness in support of our clients' needs.
- Develop project partnerships into long-term strategic partnerships with clients.
- Anticipate transportation issues and trends and continuously adjust the Center's capabilities to respond to changing needs.
- Provide an effective bridge between the public and private sectors.

## Assumptions

This plan is based upon six central assumptions:

- Emerging areas of national concern, many embodied in specific major legislation, will influence and shape Volpe Center work.
- The role of private sector organizations and state, local and non-DOT Federal agencies in transportation planning will grow.
- Strategic planning and anticipation of transportation issues will be increasingly important to clients and the Center.

# I. Introduction

## Request from Congress

The Senate Appropriations Committee has asked the Research and Special Programs Administration (RSPA) to prepare a plan for the future of the Volpe National Transportation Systems Center:

> *As part of the 1992 budget submittal, the Committee directs RSPA to include a plan for the future of the Transportation Systems Center. This document shall assess whether TSC should seek to become a more comprehensive and effective National Transportation R&D Center. The plan should specify how TSC will change its mission, functions, and status in relation to national needs in transportation and logistics. Consideration should be given to how TSC will handle any changes in size and personnel needs and whether TSC should seek to be of increased use to FHWA in its research and development programs and to State and local governments. If the plan calls for an expansion of TSC's size or role, then the plan should stipulate objectives for such an expansion and specific milestones for achieving these objectives. (S. Rep. No. 101-398, 101st Cong., 2nd sess., 144)*

As this plan addresses these issues, it will show that change is not new to the Volpe Center; in fact, it is an inherent part of its operation. The Center anticipates and responds to national priorities and supports changing needs by adapting its skills and redirecting its activities. By anticipating such needs, the Center is able to provide timely support on complex technical issues to the Office of the Secretary (OST), DOT operating administrations, and other clients.

## Evolution of the Volpe National Transportation Systems Center

### *A Broadening Range of Skills*

Over the past two decades, the Volpe Center has broadened its skills and its client base both inside and outside the Department of Transportation (DOT). The Center's engineers, economists, and analysts have researched, developed, evaluated, and shared advances in virtually every area of transportation, including mass transit technologies, air traffic control concepts and systems, highway traffic control and signing, automobile crashworthiness and fuel economy, railroad safety standards, radionavigation systems for marine safety, and hazardous material spills detection and mitigation.

Initially concentrated in hardware engineering, the Center's expertise has shifted to strategic planning and system development and integration. This multimodal base of transportation expertise has enabled the Center to become increasingly responsive to its diverse clients. For example, the Center plays an important role in support of DOT's commitment to coordinating the efforts of the many agencies and individuals who shape and are affected by national transportation policy.

With its diversity and expertise, the Center is positioned to facilitate the public-private exchanges envisioned by DOT. It can function as a transportation-community meeting place, where public and private interests in air, rail, sea, highway, pipeline, and mass transit all work together.

### *Anticipating Transportation Issues and Trends*

Because of its comprehensive experience, the Volpe Center is being asked by more and more of its clients to anticipate transportation issues and identify trends.

To support the Secretary's public outreach during the development of the National Transportation Policy, the Center designed and conducted seminars on issues that cut across all modes of transportation. Issues included the special needs of the transportation-disadvantaged, transportation and future energy requirements, transportation aspects of national security, transportation and the environment, and transportation as an engine of economic growth.

### *Unique Multimodal Perspective*

The Volpe Center is employing its multimodal perspective to assess intercity and other transportation markets from the viewpoint of shippers, travelers, and affected communities, as well as that of carriers. The Center also is assessing the transportation system's impact on the environment, on economic growth and competitiveness, on the quality of life, and on national security. To improve the performance of transportation and logistics systems, the Center is facilitating the transfer and application of information and communications technology. It supports national initiatives aimed at fostering technologies for future transportation systems, such as MAGLEV and Intelligent Vehicle/ Highway Systems (IVHS).

### *Bridge Between Public and Private Sectors*

Throughout its evolution, the Center has found it advantageous to develop information exchange networks among state, local, private sector, and academic entities. Over the years, this interaction has been encouraged by a series of transportation colloquia aimed at increasing awareness of future transportation needs and opportunities.

Today, the Volpe Center is providing a vital scientific and technological bridge linking Federal agencies, industry, and academia. Typical examples are the Center's stewardship of DOT's Small Business Innovation Research (SBIR) Program on behalf of the operating administrations, and the Center's role in establishing scientific and technological relationships among operating administrations, University Transportation Centers, and users of transportation research.

### *A Transportation Training Ground*

An important aspect of the Volpe Center's interaction with the transportation community is the exchange of professionals. Because of the comprehensive nature of its programs and its position on the leading edge of system developments, the Center has served as a training ground for future transportation experts. Recently, the Center started a "Gateway" program that provides recent graduates and technical professionals with opportunities to spend up to 4 years working with multimodal transportation and logistics systems. Graduates of this program will have the potential for long-term transportation careers within the Center, within other DOT organizations, or within other segments of the industry.

### *Positioned to Meet the Challenges of the 1990s*

One of the central aims of the National Transportation Policy announced by the President in February of 1990 is to advance U.S. transportation innovation and expertise. It stresses that technology alone cannot solve today's transportation problems; rather, what is needed is a multimodal approach that addresses capital and human resources as well as technological advances. New partnerships will be required with state and local governments, with private industry, and with academia. At this point in its evolution, the Volpe Center is positioned to help its clients respond to the challenges embodied in these new policy directions.

### *The Nation Needs a National Transportation Center*

There is a clear need for a scientific and technical organization at the national level that views the transportation system as an organic whole; that has a systems perspective; and that serves as a bridge connecting government, industry, and academia. In working for all of the DOT administrations, OST, and other clients, the Volpe Center has developed into a DOT institution that can satisfy this national need.

## Plan for the Future

This plan describes how the Volpe Center will become more comprehensive and effective in the future. As such, it will serve as a foundation for the

Center's detailed business planning. Sections II through V address the Center's mission and status, growing needs for technical services, initiatives to expand technical capability, and objectives and milestones for the Center's expanded role.

*Evolving Mission and Status*

Section II presents the mission, functions, and status of the Volpe Center. As currently authorized, the Center may undertake research, development, testing, evaluation, and analysis for a full range of public and private clients. Until the mid-1980s, this statutory authority was narrowly applied, and almost all of the Center's efforts were devoted to OST and the DOT operating administrations. In recent years, the Center has provided a growing level of transportation and logistics assistance to other Federal agencies.

*Growing Demand for Technical Services*

Section III discusses the changes that have led to a growing demand to date for the Volpe Center's services. Over the past 10 years, the Center's new obligational authority (new work) has increased almost fourfold to nearly $200 million per year. There also has been a significant change in the Center's client mix and work content. During the next few years, the Center proposes to broaden its traditional client base to include regional, state, and local governments; industry; and foreign countries.

*Management Initiatives to Expand Technical Capability*

Section IV describes a series of proposed management responses to the projected growth of the 1990s. Areas under consideration include flexibility to "manage to workload"; personnel retraining, retention, and recruiting; increased contractor technical support; and strengthened management processes.

*Objectives and Milestones*

Section V presents objectives for the initiatives discussed in Section IV and stipulates specific milestones for achieving these objectives.

# II. Mission, Functions, and Status of the Volpe Center

## Statutory Basis

Since its establishment in 1970, the Volpe Center has been funded directly by its clients; the Center's projects are therefore market-driven, in that they are organized and staffed in response to customer needs. Work at the Center is funded through a working capital fund established by law. The Department of Transportation Act, as amended, permits the Center to serve clients both within and outside the Federal Government:

> *Amounts in the fund are available for financing the activities of the Center, including research, development, testing, evaluation, analysis, and related activities the Secretary of Transportation approves, for the Department, other agencies, State and local governments, other public authorities, private organizations, and foreign countries. (49 U.S.C. 328(a), 1982)*

Payments into the fund from outside sources can be authorized by the Secretary, in accordance with subsection (d) of this statute. This authority has been delegated to the Administrator, Research and Special Programs Administration.

## The Mission

The Volpe Center's mission and vision of the future have evolved to meet changing national priorities. Starting in 1970, the mission was interpreted rather narrowly; services were provided almost exclusively to DOT operating administrations and to OST. In 1985, OST broadened the Center's mission to include transportation and logistics support for other Federal agencies such as the Department of Defense (DoD), Environmental Protection Agency (EPA), and Department of Energy (DOE). Currently, about two thirds of the Center's work supports OST and the operating administrations. About a third is concerned with agencies having transportation needs that the Secretary has statutory responsibility to help address.

The Center is ready in 1991 to further broaden its scope and give increased assistance to other Federal agencies and to state and local governments, public authorities, private organizations, and foreign countries. As before, the Center will balance various areas of need under the direction of the Secretary of Transportation through the RSPA Administrator. The Center's proposed mission statement, currently under review, reflects DOT's expanding role in meeting national transportation and logistics needs:

> *In support of Departmental policy objectives the Volpe National Transportation Systems Center shall anticipate future national, state, local, and international transportation and logistics issues and requirements, and respond to current needs and priorities in accordance with its role as the national center of transportation and logistics expertise.*.

## Functions of the Volpe Center

To respond to challenges in the 1990s and beyond and to fulfill its role as the Department's national transportation and logistics resource, the Volpe Center performs the following functions:

- performs research and development on new transportation technologies for all elements of the Department
- serves all elements of the Department as an independent and objective resource for the study of critical transportation issues
- manages large-scale development programs and provides planning, management, and research assistance for transportation and logistics acquisitions, assuring that all levels of government are "smart buyers"
- anticipates and creates an awareness of regional, national, and international transportation and logistics issues, trends, and choices to support informed decision making
- facilitates communication and information exchange among industry; academia; and local, state, Federal, and foreign governments
- enhances the development of transportation expertise both within and outside government to enable the nation to better respond to future transportation and logistics requirements
- supports strategic planning and policy analysis through balanced cross-modal assessments of the transportation system's future needs, technologies, and operational innovations

The last four of these functions represent a new emphasis for the Center. In performing these services, the Center has begun to forge important links within the transportation and logistics community, helping to ensure effective operation of all elements.

## Status of the Center

Over the past decade, the Center's Federal status has been the subject of considerable attention. In 1985, with a desire to increase the Center's "efficiency and effectiveness," the Administration proposed "de-Federalization." However, starting with the fiscal year 1985 DOT Appropriations Act, Congress preserved the Center's Federal status and precluded DOT from planning or taking any action that might change it. The fiscal year 1991 Appropriations Act modified this restrictive language, permitting planning for the Center's further development as a Federal entity.

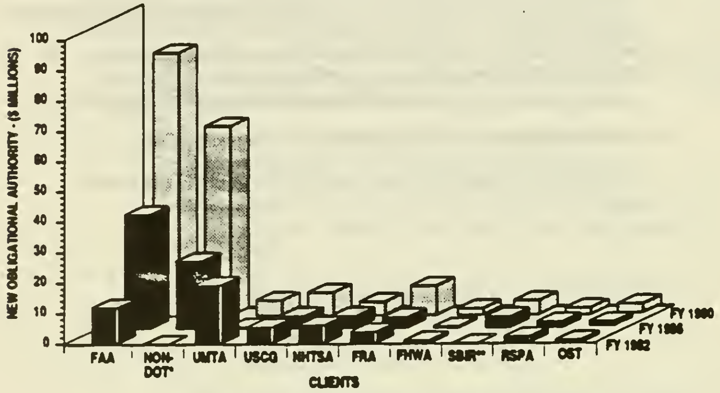
The Administration's position is one of commitment to the Center.

This report is concerned with future planning for the Center as a Federal entity.

# III. Growing Needs for Volpe Center Services

## Changing Client Needs

As the nation's transportation priorities have changed, so have the Center's clients and the level of need for Center services. Figure 1 shows different sponsors' changing demands for Center expertise as indicated by new obligational authority.



* Includes $58.3M from DoD and $4.5M from State, Commerce, and other Departments in FY 1990.

** Small Business Innovation Research

FIGURE 1. Demand for Volpe Center Services

The figure illustrates some striking changes and points out the Center's flexibility in meeting client needs:

- In fiscal year 1982 the Urban Mass Transportation Administration (UMTA) was the Center's major sponsor. Four years later, UMTA shifted its research and development emphasis from advanced system hardware demonstrations to technical assistance to local authorities, and, as a result, the agency's requests for Center assistance diminished.
- As national attention became focused on the needs of agencies outside DOT, nearly one-third of the Center's obligations were

shifted to solving transportation and logistics problems for DoD, EPA, and DOE.

- Because of the need to modernize the nation's airports and airways, the Center's support to the Federal Aviation Administration (FAA) grew from about one-tenth to nearly one-half of its work, measured in obligations.

## Shifting Work Content

Over the past several years, the technical content of the Center's programs has reflected changing client needs (see Figure 2).

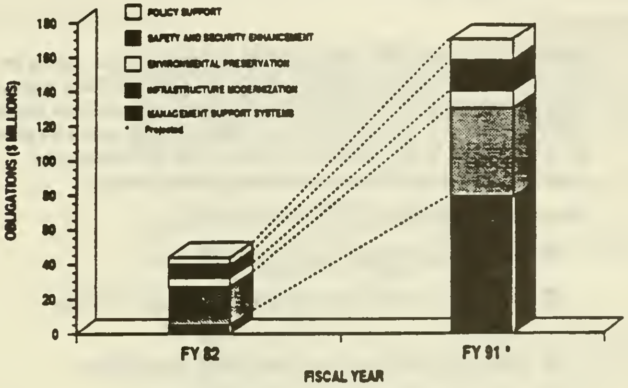


FIGURE 2. Changing Work Content

*Policy Support*

As the Center has taken a more proactive role at the request of its clients in creating awareness of transportation issues and trends, it has increased its policy support activities for informed decision making and front end planning. Examples of current work (and clients) are

- outreach seminars on topics such as the role of transportation in economic growth and competitiveness, innovative infrastructure financing, human factors, and future needs for transportation professionals (OST)

- analysis for major departmental acquisition decisions regarding search-and-rescue-helicopter engines, the Microwave Landing System (MLS), and the Coast Guard's buoy tender fleet (OST)
- technical and economic assessments of intercity passenger services such as the Northeast Corridor and MAGLEV (OST, FRA, UMTA)
- operations research that will assist the Coast Guard in allocating resources to reduce the risk of oil spills in major ports (USCG)

### *Safety and Security Enhancement*

Although the Center's safety program has grown over the years, during the 1980s there was a shift from laboratory testing (breathalizers, flame-retardant materials, new types of aircraft tires) to human factors research (crew fatigue, information overload, cockpit design). In addition, terrorist threats led clients to request that the Center broaden its security work to include computer security, electronic surveillance, and perimeter (border) security.

Current safety and security projects address such issues as

- aircrew human factors and cockpit design (FAA)
- air traffic controller human factors and future system design (FAA)
- structural analysis and inspection of aging aircraft (FAA)
- motor vehicle front- and side-impact crashworthiness (NHTSA)
- safety of European high-speed rail and MAGLEV systems (FRA)
- computer security requirements and security methods for air traffic control systems (U.S. Air Force, FAA)
- systems for detecting and interdicting cross-border airborne drug traffic (U.S. Customs)

*Environmental Preservation*

National and international concerns about preserving the environment have spurred a renewed emphasis on controlling aircraft and airport noise and on preventing and responding to oil spills and other environmental incidents. Some current Center programs address

- noise impacts of and abatement methods for rotorcraft, airports, and highways (FAA)
- environmental impacts of the recently revised East Coast Airspace Plan (FAA)
- emergency response management systems for oil spills and other hazardous materials incidents (USCG, RSPA, EPA)

*Infrastructure Modernization*

The Center's work has shifted from developing new systems to upgrading and modernizing existing ones. At the Federal, state, and local levels, pressure has been growing for programs needed to increase highway capacity and to maintain and rehabilitate the surface transportation infrastructure. Examples of such Center programs are

- analysis of and planning for IVHS elements for highways and transit systems (FHWA, UMTA)
- rehabilitation of railroad track and rolling stock at military bases and ports (U.S. Army)
- systems engineering and evaluation of ground- and satellite-based communications, navigation, surveillance, and landing systems such as LORAN C, the Global Positioning System, and the MLS (FAA, USCG, U.S. Air Force)

*Management Support Systems*

In recent years, the greatest growth in requests for the Center's technical expertise has been for those involving the development of management support systems. By employing technologies for information processing, storage, communications, and display, such systems can yield major productivity improvements in traffic, logistics, and administrative management. Examples of such work include

- real-time nationwide display of aircraft for improved air traffic management (FAA)

- comprehensive analysis of agency missions, processes, operations, and system designs to exploit modern information-processing and communications technologies (FHWA, USCG, OST, FAA, U.S. Transportation Command)
- application of geographic information systems to local, regional, and national transportation system planning (UMTA)
- information systems architecture and integration for transportation and logistics management (FAA, USCG, DoD)
- demonstration of real-time cargo and vehicle tracking for military and civilian uses (such as hazardous and time-sensitive cargoes) (FAA, DoD, Department of Agriculture, U.S. Customs)

## National Transportation Needs and Changing Constituencies

### *Needs and Priorities*

Transportation demand is driven by increasingly complex patterns of trade and commerce. Among these are the globalization of the economy, the shift to a more service-based industry, population growth in suburban and rural areas, and changing lifestyles and associated mobility needs. Not only is transportation influenced by these patterns, but it plays a major role in shaping them. In order to serve its clients, the Center must remain on the cutting edge of transportation technologies and must consider the following factors and priorities:

- The nation continues to place its highest priorities on transportation safety and security (Aviation Safety and Capacity Expansion Act of 1990, Aviation Security Improvement Act of 1990).
- The possible effects of transportation on global warming, smog, acid rain, oil spills, and land use underscore the importance of environmental preservation (Clean Air Act Amendments of 1990, Oil Pollution Act of 1990, Hazardous Materials Transportation Uniform Safety Act of 1990).
- The increasing average age of Americans is changing our transportation needs. There is a mandate to assure accessibility and mobility for all citizens, rural and urban (Americans with Disabilities Act of 1990).

- Responsibility for infrastructure maintenance and rehabilitation will continue to be shared between the Federal Government and state and local authorities.
- Demand for freight and passenger transportation is increasing and is likely to rise even more with the development of a global economy. In some areas, intercity air transportation and urban/suburban highway systems already suffer from severe and costly congestion.
- Military transportation requirements are met predominantly by the civil sector.

These considerations challenge transportation policy makers and managers to balance complex economic and efficiency factors with quality-of-life concerns. Collectively, they hold major implications for virtually every mode of transportation.

### *New Roles and Responsibilities*

In the words of the National Transportation Policy, "the Nation faces a unique opportunity to address the challenges of a changing society and economy, new technologies, and new roles for the members of the transportation community. To have the transportation system we need for the future, we must recognize new and different roles for Federal, State, and local governments and incorporate that realignment within government transportation programs."

Expanding and restructuring partnerships within the transportation community will be a lengthy and complex undertaking requiring commitment, adaptability, and creativity. A new level of coordination and joint action must be reached among the various participants -- the levels of government, transportation providers, equipment and service vendors, academia, and public-interest organizations. Public-private partnerships show special promise for meeting the needs of the next century.

## Future National Needs

Changing transportation priorities and partnerships will create new needs to which the Volpe Center may be called upon to respond. Under policy guidance from the Secretary through the RSPA Administrator, the Center will direct its current and future support to

- OST and the DOT operating administrations
- other Federal agencies

- state, local, and regional authorities
- foreign governments and international agencies
- private-sector organizations

*Needs of Federal Agencies*

In responding to national priorities, the operating administrations within DOT and other agencies with transportation and logistics responsibilities (such as EPA, DOE, and DoD) face monumental challenges. As the nation's transportation system adapts to changing demographics, economics, technologies, and strategies, its evolution will be subject to the constraints of safety and security, environment and energy, and mobility and accessibility. Federal agencies devise and enforce regulations, conduct research and development, operate traffic-control and logistics systems, and provide stewardship within an increasingly interactive system. With its multimodal perspective and systems approach, it is likely that the Center will be called upon to meet these and other Federal agency needs:

- logistics systems design and development based on advanced information technologies
- strategic planning and analysis using comprehensive databases on the transportation system's demands and constraints
- business analysis and planning for agencies' organizations and policymaking
- research fostering the application of advanced technologies (such as low-temperature superconductors) to transportation system innovations
- analyses of the impacts of transportation innovations (such as those generating high electromagnetic fields) on public health and the environment

Along with these challenges, major changes will confront DOT with passage of the surface reauthorization legislation. Areas in which the Center could increase support or offer new services to DOT include

- application of change management techniques to the comprehensive rethinking of basic agency missions and goals in its proposed new stewardship role

- use of information technology to design a business information system consistent with FHWA's new role
- provision of advanced electronic system expertise for government-industry research on the proposed IVHS

*eeds of State, Local, and Regional Authorities*

Stewardship of the nation's transportation infrastructure is shared increasingly with state, local, and regional governments. At the same time, these entities must respond to transportation-related provisions of the Clean Air Act, Americans with Disabilities Act, and other legislation. In so doing, they will have to deal with intermodal issues and impacts of a technical complexity never before faced. Developing effective partnerships with the private sector and implementing innovative means of financing also will call for further expertise. To address these emerging needs, the Center will work in conjunction with regional UMTA, FHWA, and other DOT offices to provide state and local authorities with support on intermodal and technical issues. Areas where the Center anticipates specific needs include

- comprehensive data and technical information to support decisions on alternative investments in airports, highways, transit, and intercity rail
- means for evaluating innovations in services, management, and technology
- planning tools for locating intermodal facilities and selecting among route and technology options
- technical tools and methodologies to ensure that system improvements conform with air quality and other environmental objectives
- effective means of understanding and managing travel demand to minimize congestion without limiting mobility and access
- understanding of ways to exploit opportunities available through innovative financing strategies and through broadened partnerships with public and private agencies
- improved capability to identify and assess future transportation issues and trends and to take full advantage of information exchange and technology transfer

### *Needs of International Agencies and Foreign Governments*

The National Transportation Policy states that "The Department is in a unique position to learn of and share information about innovative transportation technologies and operations being developed around the world. Through its cooperative programs with other countries, the Department has the opportunity to make certain that the U.S. transportation community is aware of and has access to emerging technological advances." A related goal is to demonstrate to the world the U.S. transportation community's technological capabilities. This would foster the transfer of technology to developing countries and help U.S. firms compete for business in foreign markets.

Needs associated with these aims are for the following:

- better awareness and detailed assessments of technical and operational developments abroad, including their potential relevance and value in U.S. applications
- effective exchange programs involving U.S. and foreign transportation experts, both public and private
- forums for information exchange such as international technology-transfer centers

Working for and through OST and the international offices of the DOT administrations, the Center can facilitate information exchange and technology sharing with the worldwide transportation community.

### *Needs of Private-Sector Organizations*

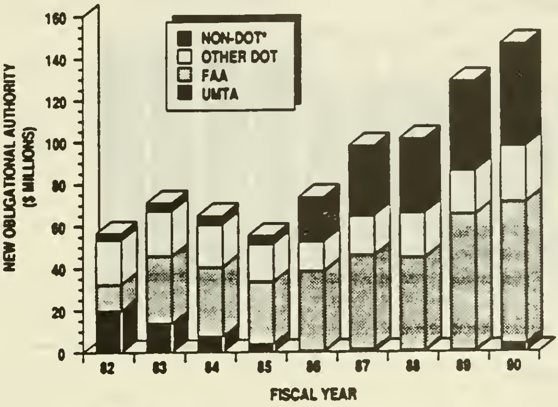
Calling for the advancement of U.S. transportation technology and expertise, the National Transportation Policy emphasizes the importance of innovative approaches. New technologies and managerial techniques with potential relevance to transportation are becoming available at an increasing rate, and the Center can be instrumental in developing or implementing many of them. Therefore, there are numerous areas in which the Department could respond to private-sector needs in conjunction with the Center:

- Merged data acquired by the government from multiple sources (organized for specific public purposes and validated and refined as appropriate) can have a value far beyond that of the individual data sets.
- Technology assessments and visions of future national transportation needs and issues can be made more useful to U.S. industry.

- Commercialization of government-sponsored research results can be accelerated by stronger technology transfer programs and joint government-industry enterprises.

## Clients' Needs

As discussed previously, over the course of the Center's history there have been major shifts in customer mix (Figure 1) and in work content (Figure 2). Moreover, the past 9 fiscal years have witnessed a fourfold increase in new obligational authority, from about $50 million to nearly $200 million per year in current dollars. Figure 3 shows the trends in constant 1982-84 dollars.



* Includes $58.3M from DoD and $4.5M from State, Commerce, and other Departments in FY 1990.

FIGURE 3. Clients and Workload Represented by New Obligational Authority

Although the Center has undertaken some retraining and selective recruiting, customers' changing needs primarily have been met through increases in contractor staff. Since 1982, the Federal staff has been held constant at about 550 full-time equivalent (FTE) personnel, while the combined on-site and off-site contractor staff has increased from about 250 to 1,000 FTE (see Figure 4).

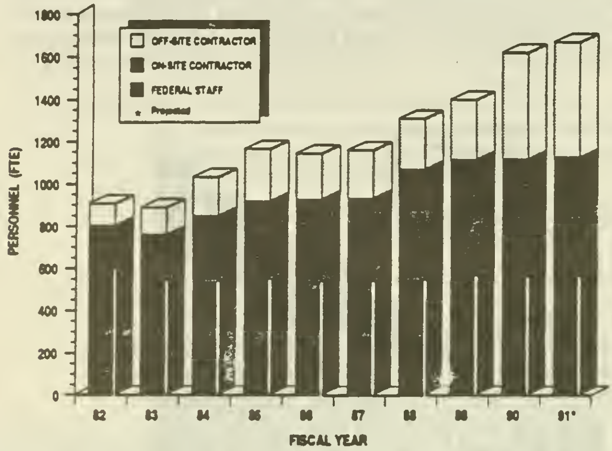


FIGURE 4. Human Resources

*Center Challenges*

As summarized in this chapter, the Center's technical work content and the distribution of work among modes of transportation have changed significantly during the past decade. Laboratory and field testing have given way to systems analysis, operations research, economics, and information technologies. Intermodal and cross-modal work has grown steadily, reflecting fundamental changes in the transportation industry. Traffic and logistics management systems developed at the Center are already in operation and now routinely handle volumes of data that were inconceivable 10 years ago. The volume of work in support of the FAA's air traffic control system is now greater than the Center's total program of the early 1980s. Clearly, the character of the Center has changed in keeping with the needs of the Department of which it is a part.

The Center looks to a future in which national priorities include international economic competitiveness, diversity, rebuilding the infrastructure, public/private cooperation and partnerships, innovative financing, renewed technological leadership, and reallocations of Federal and local government responsibilities.

# IV. Management Initiatives

It is the Center's objective to adjust its staff resources continually to meet the challenges of the 1990s. To address the diversity of client needs, the Center proposes the following initiatives: "managing to workload"; personnel retraining, retention, and recruiting; increased contractor technical support; strengthened management processes; and assessing the need for future management of the Volpe Center site.

## Managing to Workload

Over the past decade the Volpe Center has adapted its skill mix and total employment to match the changing demands for its services primarily by adjusting the levels and skills of its contractor personnel.

In addition to carrying out their own research assignments, Federal professionals are responsible for technical direction and oversight of an increasing number of contractors. As the Center moves into the 1990s, there is a critical need to be able to respond to an even more rapidly changing technical environment. Retraining and replacement will continue, but may not be sufficient to be responsive to the new environment or to provide adequate technical accountability of contractors.

The Volpe Center has proposed in FY 1992 to ensure its capability to respond to rapidly changing requirements by annually determining and then adjusting the appropriate level and mix of its Federal staff and limited-term employees within the overall employment ceiling for the Center.

Limited term appointments would be for 2 years maximum, renewable for 2 more years. Appointees would include new college graduates, distinguished senior researchers on sabbatical from industry or academia, and experienced technical professionals wishing to embark on new careers in transportation. The use of limited-term employees would permit the Center to maintain the number of full-time permanent employees at a level consistent with the essential specialties and professional experiences needed for the long term. Increasing or decreasing the number and changing the skill mix of the limited-term appointments would provide the Center with the flexibility to continuously adjust its technical capabilities and, at the same time, to bring a stream of new ideas and professional resources into the transportation community.

Over time, and subject to annual review of staffing requirements, new full-time permanent employees may be needed to respond to the Center's changing needs for critical specialties, to replace attrition in an aging work force, and to provide technical guidance to new limited-term employees hired through the Gateway program.

In parallel with efforts to introduce a manage-to-workload approach, the Center will investigate means to streamline procedures and to allow a more rapid response to changing needs. Parts of the Department of Veterans Affairs, the Federal Retirement Thrift Investment Board, and certain agencies of the DoD, including the Army Materiel Command, Natick Laboratory, have been operating under a flexible ceiling that can be increased or decreased annually, depending on the level and nature of the workload. This more general manage-to-workload concept could be used successfully at the Volpe Center. However, many questions remain to be addressed, such as the assurance of appropriate management controls and the steps necessary to implement such a concept.

## Personnel Retraining, Retention, and Recruiting

### *Management Challenges*

A major factor limiting the Center's response to increasing demands for services is its ability, as a Federal employer, to rapidly locate, acquire, and assimilate highly qualified people. The Center is preparing to address several challenges:

- Although operating under civil service constraints, the Center must find a way to compete with industry for the people who will invigorate its work force and increase its diversity.
- Within the next 5 years, more than one-half of the Center's senior technical managers will become eligible for retirement or new career opportunities, as illustrated in Figure 5. Based on current Federal employment experience, about one-third of those eligible will retire in a given year. This implies a retirement rate over the next several years that is two to three times what would normally be expected. Since most of these positions call for engineering disciplines that are in short supply, there will be a clear need for special succession planning. This is a problem common in other Federal laboratories such as those at DoD, EPA, and the National Aeronautics and Space Administration (NASA).

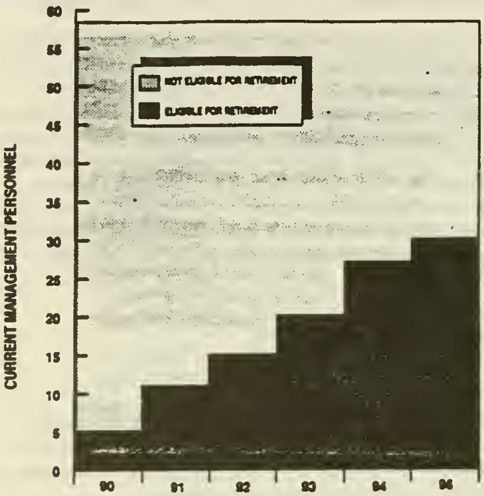


**FIGURE 5. Cumulative Retirement Eligibility of Management Staff**

- The Center needs to attract highly capable, forward-thinking university professors, graduate students, and interns who would be eager to take on challenges in transportation and logistics research.
- The Center must determine how best to apply relevant portions of the new Federal Employees Pay Comparability Act to its work force, subject to approval of the Office of Personnel Management (OPM) and the Secretary of DOT.

### *Planned Human Resource Initiatives*

The Volpe Center enjoys many advantages in attracting and keeping talent. Its work is at the "leading edge" of technology and is applied directly to issues of national significance. Research is performed in a professional environment in which even new employees can influence work assignments and processes. Located at one of the world's leading academic hubs, the Center can draw upon a vast pool of exceptional talent. The Center also provides amenities such as on-site child care and an employee fitness center.

The Center will accelerate efforts to recruit, develop, retain, and promote women, minorities, and people with physical disabilities. It will improve supervisory training, enhance its orientation program, expand career planning and counseling, and dedicate more resources to employee development. To accomplish these goals, the Center proposes the six initiatives listed below. Together, these programs would make the Center a leader in attracting, developing, and applying the skills of an increasingly diverse work force.

- Pay comparability -- In concert with other Federal agencies (such as NASA, EPA, and DoD), the Center will assess the provisions of the recently enacted Federal Employees Pay Comparability Act, subject to the approval of OPM and the Secretary. These provisions are intended to improve the ability to attract and retain specific categories of professionals, including transportation and logistics experts of "world-class" reputation.

- Multiple career paths -- The Center will pursue a program of parallel career paths for scientists, engineers, and other transportation specialists to enable them to continue as active researchers in the Federal service.

- Gateway program -- The Center has instituted a Gateway to Careers in Transportation Program in which recent college graduates and experienced professionals work under limited-term, noncareer appointments. These individuals will bring fresh ideas and knowledge to the Center while receiving training as transportation experts. By participating in the program, they will further their transportation careers in the public or private sector or in academia and will provide a recruiting base for the Department. It is anticipated that grantees under the DOT's University Transportation Centers Program will serve as a major recruiting ground for this effort, as well as for other transportation programs.

- Distinguished researchers -- The Center will develop a program to attract distinguished transportation researchers retiring from industry or academia who are interested in combining research leadership with public service; these experts will be appointed to limited-term, noncareer positions. To increase interchange of senior professionals, the Center also will employ the Intergovernmental Personnel Act, the Department's Professional Exchange Program, and the Center's Faculty Fellows Program.

- Supervisory and management training -- The Center will develop a comprehensive training program that addresses continued diversity management, supervisory and management training, and career development for core professional staff.
- Co-op program -- The Center will continue its graduate co-op program and expand it from New England schools to colleges across the country.

## Increased Contractor Technical Support

### *On-site Support*

Since its founding in 1970, the Center has supplemented its professional staff with two on-site contractors: one for services in computer-supported analysis, and the other for technical information and documentation support. Since fiscal year 1982, the on-site contractor staff has grown from approximately 200 to 500 employees (Figure 4).

Because they combine the advantages of private-sector competition with the ability to monitor their performance, on-site contractors have proved to be an economical means for expanding the Center's capabilities. Preparations to recompete these on-site contracts, and possibly to expand this type of support, are scheduled to begin this year.

### *Off-site Support*

Based on recommendations of the 1986 Packard Commission, the Center has developed an innovative and highly successful Multiple Contractor Resource Base (MCRB). By providing ready access to the private sector's best skills, the MCRB has helped the Center to accomplish the following:

- reduce the time for competitive task awards from 18 months to about 2 months
- increase the involvement of the private sector and expand the Center's access to a wider range of new ideas
- maintain competition and opportunities for small businesses

Since the MCRB's introduction in fiscal year 1989, the number of off-site contractor personnel has risen to about 300. Within the coming year, the Center will begin preparations to recompete the MCRB contracts; the contracts' capacity will be adjusted to accommodate current and future demands. Other contracts, including "8(a)" and small business "set-asides," represent about one-half of all off-site services and are competed for on an as-needed basis.

## Strengthened Management Processes

### *Intermodal Activism*

To take full advantage of its wide-ranging experience and unique overview of the performance of the nation's transportation sector, the Center will strengthen the level and effectiveness of communication aimed at coordination and cooperation among its modal program managers. In this way, the Center will foster cross-fertilization among its modal programs and obtain additional benefits from its efforts. Through ongoing technical workshops, seminars, and outreach activities, the Center will provide a forum for the exchange of information on intermodal transportation issues and markets. It also has the potential to serve as a central contact point for other Federal agencies, for state and local governments, and for private and other community groups with an interest in multimodal transportation issues.

### *Total Quality Management*

Organizationally, the Center is shifting from a hierarchy to a "team" structure emphasizing accomplishment of project goals through interoffice collaboration. The Center is applying principles and methods of total quality management to its work, and within the past year has implemented on-site career planning, on-site employee counseling, and diversity training.

### *Facilitating Access to Private-Sector Skills*

The Volpe Center's concept of operations is based on forming multidisciplinary teams composed of the best available public and private talent. This necessitates contractual relationships with universities and with other transportation research and development organizations. The Center will identify and pursue potential working relationships with leading research institutions in transportation and related fields. Emphasis will be on using existing Federal laboratories and other Federally funded nonprofit institutions so as to avoid replicating such resources at the Center.

## Future Management of the Volpe Center Site

*Planning Study*

Congress has modified the restriction against future planning for the Volpe Center. DOT now has the authority to

> *...plan for further development of the Transportation Systems Center and for other compatible uses of the Center's real property, provided that any such planning does not alter the Federal status of the Center's research and development operation. (Department of Transportation and Related Agencies Appropriation Act, 1991, Pub. L. No. 101-516, Section 308)*

The Center has initiated a study to identify and assess alternative development options and innovative financing techniques for uses that support and complement its mission.

*Existing Land and Buildings*

Situated in a highly renowned academic and high-technology community, the Volpe Center comprises six buildings located on fourteen acres. Figure 6 depicts the Center's government-owned land and buildings. Including computer space, the Center now occupies about one-half of the land and houses about 1,100 people, including Center employees, DOT regional office staff, and on-site contractor staff. The planning study will focus on the three areas shown as "potential areas for new buildings and revised parking facilities."

*Requirements and Opportunities for Site Development*

Secretary Skinner has charged the RSPA Administrator with assessing the feasibility of converting land not occupied by existing buildings into a "technology park" in which the Center would serve as the core of an expanded complex of public and private organizations engaged in transportation and logistics research.

*Requirements for Special Facilities*

Depending on future workload requirements, the Center might need a number of specialized capabilities. These may be made available through a variety of means, for example, requirements under a technical support contract or partnerships with other public agencies, universities, or private-sector research institutions.

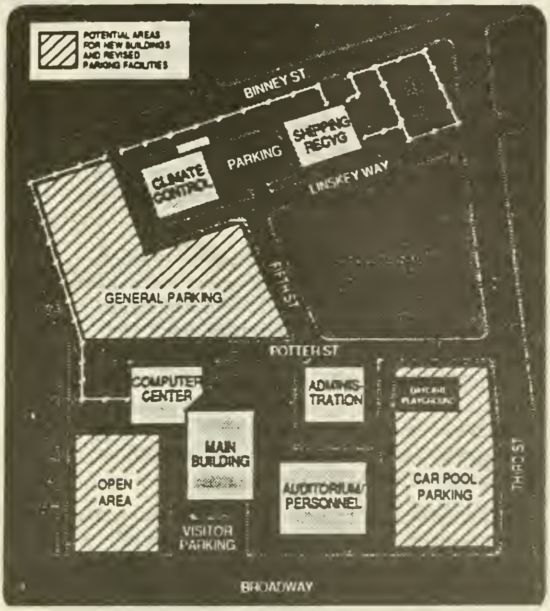


**FIGURE 6. Volpe Center Land Use**

Examples of capabilities that may be needed are

- Transportation data and simulation center -- This specialized facility would integrate multiple data and software resources (including modal and intermodal analyses and simulation programs) and make them readily available to the public and private sectors. Resources to be assembled include geographic information systems; economic, demographic, infrastructure, and transportation databases for all modes; and sophisticated display and output capabilities. These tools will let public and private agencies evaluate the impacts and effectiveness of alternative transportation policies and concepts.
- Transportation and logistics software center -- This facility would serve as public and private organizations' catalyst,

facilitator, and clearing house for transportation and logistics software. Work would start with identifying successful software (developed by the Federal, state, or local governments) that is of value to a broad community. Together with developers and potential users, the facility would test and evaluate software, assist in making improvements, encourage refinements to ease integration with other applications and databases, and develop appropriate documentation. The facility also would offer ongoing support for each application, assuring that changes are implemented efficiently.

- Transportation human factors research center -- National attention has been drawn to the urgent need to reduce human errors in transportation. A human factors research center would permit assessments of team performance, measurements of electrophysiological activity, and tests of new workstations and software. Operated by a consortium of Federal agencies, local universities, and private research organizations, this facility would be available to state and local agencies and to companies developing or operating transportation systems.

- Outreach and training facilities -- In the 1990s, state and local governments and regional authorities will be especially affected by restructured roles and responsibilities. Modern computer-aided conference facilities would increase the efficiency of Center outreach seminars, collaborative research projects, executive training programs, and workshops on technical and management innovations.

# V. Objectives and Milestones

As requested by the Senate Appropriations Committee, this section summarizes the Volpe Center's objectives for expanding its role to meet the challenges to the transportation system in the 1990s. It describes near-term actions and milestones for achieving these objectives through implementation of the initiatives presented in Section IV.

## *Managing to Workload*

### *Objective*

Institute a process that permits the Center to make prompt adjustments to the level and skill mix of its Federal staff so that it can match rapid changes in the demand for its services. This process will include approvals by OST, OMB, and Congress.

### *Milestones*

- Pending budget approval, the Center will augment its current Federal staff with up to 75 limited-term appointees by the end of FY 1992, as proposed in the President's Budget.
- In FY 1992 the Center will explore the feasibility of implementing a more flexible manage-to-workload process using limited-term employees within the overall employment ceiling for the Center.

## *Personnel Retraining, Retention, and Recruiting*

### *Objective*

Assure a highly qualified Center staff that includes the mix of technical disciplines and expertise that will be needed to meet changing demands for services.

### *Milestones*

- In FY 1992 the Center will evaluate results of its FY 1991 pilot program of rotational assignments for upward-mobility employees. The Center will establish and fill a number of additional upward-mobility positions.
- The Center will establish positions for four national experts during FY 1992 in the areas of human factors research.

applied mechanics, transportation economics, and transportation systems analysis. This will initiate a program designed to enable the Center to attract or retain outstanding scientists, engineers, and other transportation specialists by means of multiple career paths.

- In FY 1992 the Center will evaluate its initial Gateway to Careers in Transportation Program and will begin the program's training and development portions. The Center will complete a plan to recruit distinguished researchers retiring from industry and academia for limited-term appointments.
- The Center will begin implementation of a comprehensive management development program for senior management personnel in FY 1992. In addition, the Center will begin to provide on-site career-planning assistance for all employees and will develop career-path guidelines for Center occupations.

### *Increased Contractor Technical Support*

#### *Objective*

Establish a strengthened contractor base to supplement Federal staff in a timely manner and to make the fullest and most effective use of private-sector resources.

#### *Milestones*

- The Center will award contracts for expanded and strengthened in-house technical services by the end of FY 1992.
- By the end of FY 1992, the Center will award a new set of off-site contracts for its Multiple Contractor Resource Base. The new contracts, each of which addresses one of the Center's major technical areas, will provide comprehensive access to the private-sector expertise needed in the 1990s.

# Executive Summary

## Request from Congress

Responding to the request of the Senate Appropriations Committee, the Research and Special Programs Administration (RSPA) has prepared a plan for the future of the Volpe National Transportation Systems Center. This request is timely, occurring at a decisive point in the Center's development. The Center must address the need to respond to new clients (both within and outside of the Department of Transportation), to adjust its staffing resources, and to strengthen its management processes.

## Development of the Volpe Center

The Center was established in 1970 to fulfill the need of the newly formed Department of Transportation (DOT) for a systems research capability. DOT and, more recently, other agencies solicit the Center's expertise when it is needed to meet their ongoing missions or to address urgent technical, economic, or institutional problems. The Center's only funding is through formal agreements negotiated with individual clients for specific tasks.

### *Growing Expertise*

Over the past 20 years, the Center's research, analytic, and project management expertise has been applied to a wide variety of transportation problems. Center researchers have dealt with technical and operational aspects of the major issues that have faced DOT, from automotive fuel economy to upgrading the air traffic control system. The Center is strictly market-driven. It adapts its skills and redirects its efforts to meet changing customer needs and national priorities.

The Center's engineers, economists, and analysts work from a unique cross-modal perspective. Organized into multidisciplinary teams, they have the flexibility to find innovative solutions and the knowledge base to anticipate future transportation issues and requirements.

### *Increased Demand*

Initially, the Volpe Center's services were provided almost exclusively to the Office of the Secretary and the operating administrations in DOT. As its capabilities evolved and its systems approach became better known, demand grew within non-DOT agencies. Through a formal Memorandum of Understanding with the Department of Defense (DoD), the Secretary broadened the Center's mission in 1985 to include work on transportation and logistics problems facing other agencies, including DoD's Logistics

Directorate of the Joint Chiefs of Staff and the U.S. Transportation Command. Similar arrangements were made with civilian agencies such as the Environmental Protection Agency and the Department of Energy. In 1990, one-third of the Center's work was for non-DOT clients.

### *Staff Resources*

Because of a growth in services to the Federal Aviation Administration (FAA) and an increased workload under the Center's broadened mission, business during the 1980s increased fourfold to its current level of about $200 million a year. To meet this need it was necessary to significantly increase the number of support contractor personnel. To further address this issue, the 1992 President's Budget proposes staffing increases.

## Mounting Challenges

Demographic, economic, and technological forces are straining the capacity of the nation's transportation infrastructure. At the same time, there are heightened concerns about transportation safety, security, mobility, and accessibility; and growing awareness of the interdependence of transportation with other national concerns such as environmental preservation, petroleum availability, economic growth, and competitiveness. The complexity of these issues highlights the need for the Department to have a current and comprehensive source of knowledge on all aspects of the nation's transportation systems to support informed decision making at all levels of government and within the private sector. Because the Volpe Center works with and across all modes of transportation, it is in a strong position to respond to these needs.

### *New Program Areas*

In response to the rapidly changing external environment, the Center's clients have requested increased support for strategic thinking and front end planning for Federal programs. Areas of current interest include regional clean air attainment, intercity passenger service, oil spill emergency response management, and highway and airport noise abatement. To respond fully to these challenges, the Center will need to maintain and enhance its capability to provide technical support to both its existing and new clients.

### *New Clients*

As stated in the National Transportation Policy, "the Nation faces a unique opportunity to address the challenges of a changing society and economy, new technologies and new roles for the members of the transportation community." *

## VOLPE CENTER—HONEST BROKER

Mr. COLEMAN. The Volpe Center is involved in conducting intermodal research studies to improve the Department's understanding of transportation needs, services and infrastructure. The Volpe Center also conducts specialized research studies at the behest of the individual modal administrations.

How can the Volpe Center be an "honest broker" in the Department's research and development strategic planning activities when about 40 percent of the Volpe's work is generated by the Federal Aviation Administration?

[The information follows:]

The proportion of FAA work at the Volpe Center is comparable to the proportion of FAA's research and development funding when compared to the Department as a whole. Thus, there is no imbalance regarding the FAA's share of Volpe Center support. However, the fact that one administration has such a significant share of R&D resources does not mean that the research needs of other parts of the Department are in any way compromised, either in the Department as a whole or at the Volpe Center.

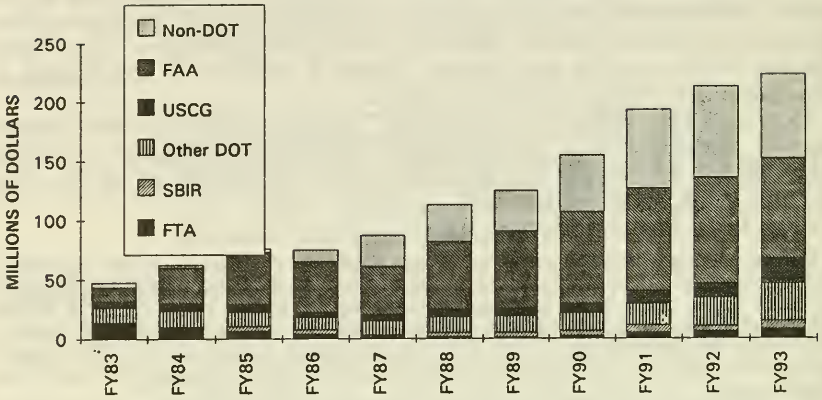
Because of its history of objectivity and impartiality, the Volpe Center is currently supporting the research and analysis activities of every DOT administration, as well as the Office of the Secretary and several other federal agencies. This reputation was also a major reason why, for example, the Secretary of Transportation recently asked the Center to prepare travel demand analyses of intercity passenger travel via road, rail and air along the Northeast Corridor; and why the Congress recently asked the Center to prepare a critical review of the FAA's Advanced Automation System (AAS).

## VOLPE CENTER—OBLIGATIONS

Mr. COLEMAN. Please provide a chart that shows Volpe Center obligations by sponsor for each of fiscal years 1983 through 1993.

[The information follows:]

VOLPE CENTER OBLIGATIONS
BY FISCAL YEAR AND SPONSOR

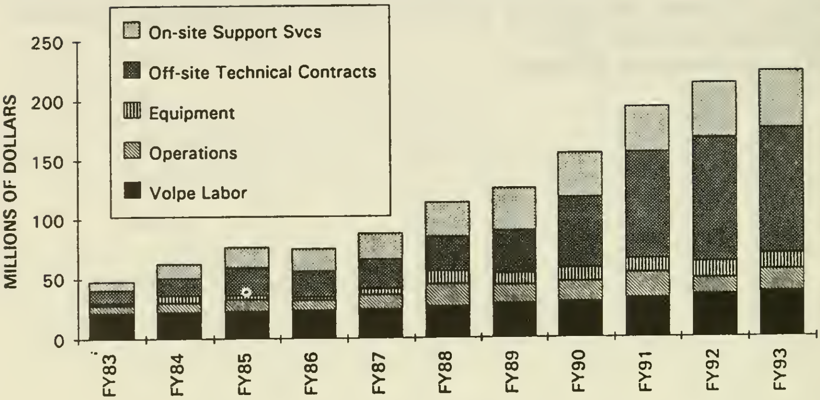


## VOLPE CENTER OBLIGATIONS BY TYPE

Mr. COLEMAN. Please provide a chart that provides a breakout of Volpe Center obligations by type of obligation for each of fiscal years 1983 through 1993.

[The information follows:]

## VOLPE CENTER OBLIGATIONS BY TYPE

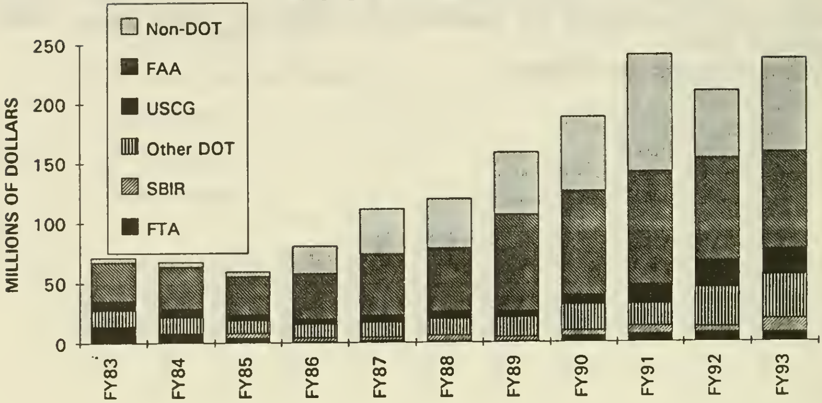


## VOLPE CENTER NEW OBLIGATIONAL AUTHORITY

Mr. COLEMAN. Please provide a chart that provides new obligational authority by sponsor for each of fiscal years 1983 through 1993.

[The information follows:]

VOLPE CENTER NEW OBLIGATIONAL AUTHORITY
BY SPONSOR AND FISCAL YEAR

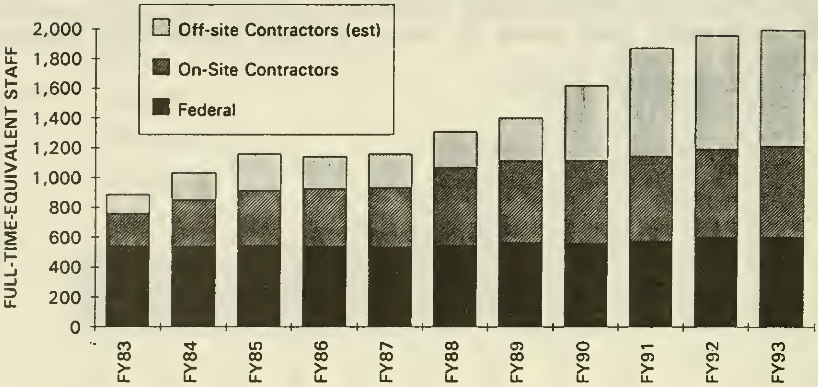


## VOLPE CENTER STAFF

Mr. COLEMAN. Please provide a chart that shows full-time-equivalent staff years broken down by federal, on-site contractor and off-site contractor staff years for each of fiscal years 1983 through 1993.

[The information follows:]

VOLPE CENTER FULL-TIME-EQUIVALENT
FEDERAL AND CONTRACTOR STAFF

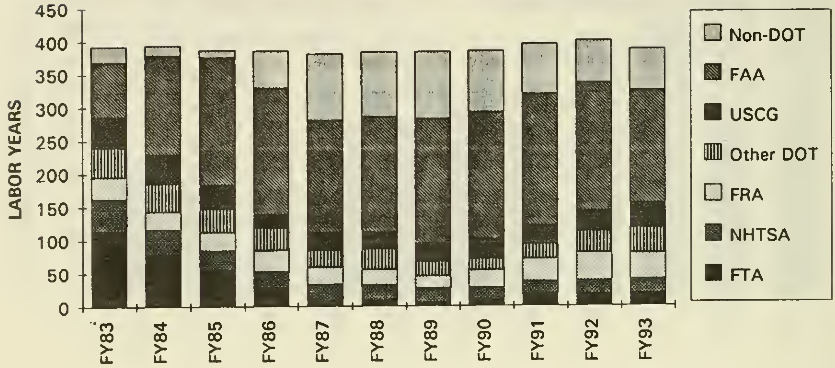


## VOLPE CENTER LABOR DISTRIBUTION

Mr. COLEMAN. Please provide a chart that shows Volpe Center labor loading by sponsor for each of fiscal years 1983 through 1993.

[The information follows:]

VOLPE CENTER DIRECT LABOR DISTRIBUTION
BY FISCAL YEAR AND SPONSOR

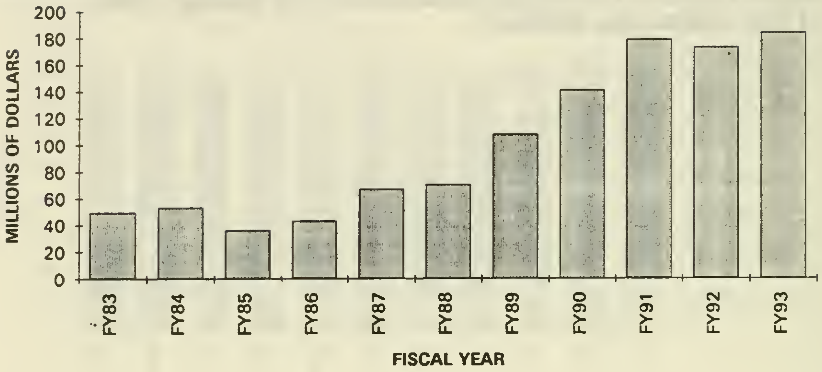


## VOLPE CENTER—UNOBLIGATED BALANCES

Mr. Coleman. Please provide a chart that shows year-end unobligated balances for each of fiscal years 1983 through 1993.

[The information follows:]

## VOLPE CENTER UNOBLIGATED BALANCES AT END OF FISCAL YEAR

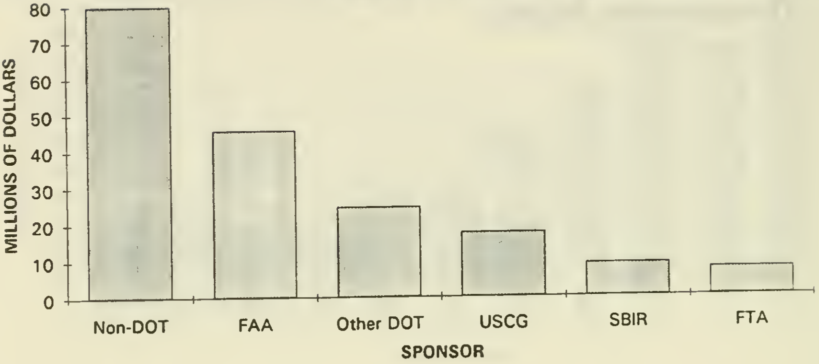


## VOLPE CENTER UNOBLIGATED BALANCES

Mr. COLEMAN. Please provide a chart that shows fiscal year 1993 year-end unobligated balance by sponsor.

[The information follows:]

VOLPE CENTER UNOBLIGATED BALANCES
BY SPONSOR AS OF 9/30/93



## PIPELINE INCIDENTS

Mr. COLEMAN. Please provide data for natural gas pipelines and for hazardous liquid pipelines on the number of incidents, and the number of deaths, injuries, and property damage caused by those incidents, in each of the years 1983 through 1993.

[The information follows:]

DISTRIBUTION INCIDENTS - 1983 - 1993

| YEAR | CAUSE | # INC | FAT | INJ | PRPTY |
|---|---|---|---|---|---|
| 83 | Construction/Operating Error | 84 | 5 | 39 | $252,446.00 |
| | Corrosion | 84 | 0 | 19 | $69,475.00 |
| | Damage by Outside Forces | 797 | 2 | 123 | $2,795,502.00 |
| | Other | 161 | 1 | 38 | $362,417.00 |
| Totals: | | 1126 | 8 | 219 | $3,479,840.00 |
| 84 | Construction/Operating Error | 62 | 5 | 13 | $752,639.00 |
| | Corrosion | 55 | 2 | 8 | $387,861.00 |
| | Damage by Outside Forces | 488 | 4 | 54 | $2,836,903.00 |
| | Other | 114 | 10 | 65 | $2,571,640.00 |
| Totals: | | 719 | 21 | 140 | $6,548,974.00 |
| 85 | Accidently Caused by Operator | 9 | 0 | 7 | $50,100.00 |
| | Construction/Operating Error | 9 | 1 | 3 | $553,255.53 |
| | Corrosion | 10 | 0 | 9 | $170,900.00 |
| | Damage by Outside Forces | 125 | 9 | 44 | $5,972,246.13 |
| | Other | 52 | 12 | 33 | $2,723,950.00 |
| Totals: | | 205 | 22 | 96 | $9,470,451.66 |
| NOTE: | Revisions were made in reporting requirements. | | | | |
| 86 | Accidently Caused by Operator | 6 | 0 | 6 | $7,400.28 |
| | Construction/Operating Error | 5 | 0 | 3 | $175,000.04 |
| | Corrosion | 4 | 0 | 6 | $657,500.00 |
| | Damage by Outside Forces | 78 | 19 | 55 | $5,611,550.00 |
| | Other | 50 | 11 | 34 | $4,617,350.00 |
| Totals: | | 143 | 30 | 104 | $11,068,800.32 |
| 87 | Accidently Caused by Operator | 3 | 0 | 2 | $20,000.00 |
| | Construction/Operating Error | 11 | 0 | 7 | $1,463,000.00 |
| | Corrosion | 9 | 0 | 9 | $226,000.00 |
| | Damage by Outside Forces | 79 | 6 | 55 | $6,081,905.00 |
| | Other | 63 | 5 | 42 | $4,045,220.00 |
| Totals: | | 165 | 11 | 115 | $11,836,125.00 |
| 88 | Accidently Caused by Operator | 4 | 0 | 3 | $5,000.00 |
| | Construction/Operating Error | 15 | 0 | 8 | $434,000.00 |
| | Corrosion | 7 | 1 | 6 | $650,000.00 |
| | Damage by Outside Forces | 109 | 8 | 380 | $7,259,651.00 |
| | Other | 70 | 16 | 68 | $5,698,285.00 |
| Totals: | | 205 | 25 | 465 | $14,046,936.00 |
| 89 | Accidently Caused by Operator | 9 | 0 | 11 | $420,000.00 |
| | Construction/Operating Error | 9 | 1 | 4 | $227,000.00 |
| | Corrosion | 6 | 3 | 2 | $278,500.00 |
| | Damage by Outside Forces | 98 | 5 | 34 | $4,016,316.00 |
| | Other | 63 | 12 | 44 | $3,989,000.00 |
| Totals: | | 185 | 21 | 95 | $8,930,816.00 |
| 90 | Accidently Caused by Operator | 5 | 1 | 3 | $349,000.00 |
| | Construction/Operating Error | 7 | 0 | 7 | $75,500.00 |
| | Corrosion | 5 | 1 | 5 | $60,000.00 |
| | Damage by Outside Forces | 72 | 4 | 30 | $4,665,426.00 |
| | Other | 23 | 0 | 7 | $2,544,114.00 |
| Totals: | | 112 | 6 | 52 | $7,694,040.00 |

| YEAR | CAUSE | # INC | FAT | INJ | PRPTY |
|---|---|---|---|---|---|
| 91 | Accidently Caused by Operator | 4 | 0 | 2 | $0.00 |
| | Construction/Operating Error | 9 | 1 | 4 | $214,193.15 |
| | Corrosion | 7 | 1 | 6 | $275,000.00 |
| | Damage by Outside Forces | 103 | 8 | 40 | $5,788,055.40 |
| | Other | 42 | 4 | 26 | $1,603,500.00 |
| Totals: | | 165 | 14 | 78 | $7,880,748.55 |
| 92 | Accidently Caused by Operator | 2 | 0 | 3 | $3,200.00 |
| | Construction/Operating Error | 9 | 0 | 10 | $103,000.00 |
| | Corrosion | 4 | 0 | 2 | $320,000.00 |
| | Damage by Outside Forces | 54 | 5 | 31 | $3,103,200.00 |
| | Other | 34 | 2 | 19 | $3,291,100.00 |
| Totals: | | 103 | 7 | 65 | $6,820,500.00 |
| 93 | Accidently Caused by Operator | 9 | 0 | 12 | $234,000.00 |
| | Construction/Operating Error | 8 | 0 | 6 | $701,000.00 |
| | Corrosion | 7 | 2 | 10 | $195,100.00 |
| | Damage by Outside Forces | 69 | 8 | 32 | $11,252,150.00 |
| | Other | 26 | 3 | 20 | $2,910,405.00 |
| Totals: | | 119 | 13 | 80 | $15,292,655.00 |

TRANSMISSION INCIDENTS - 1983 - 1993

| YEAR | CAUSE | # INC | FAT | INJ | PRPTY |
|---|---|---|---|---|---|
| 83 | Construction/Material Failure | 160 | 0 | 1 | $3,413,982.00 |
| | Corrosion | 67 | 0 | 4 | $1,314,619.00 |
| | Damage by Outside Forces | 187 | 1 | 7 | $11,479,124.00 |
| | Other | 34 | 1 | 12 | $5,436,070.00 |
| Totals: | | 448 | 2 | 24 | $21,643,795.00 |
| 84 | Construction/Material Failure | 61 | 0 | 1 | $4,665,042.00 |
| | Corrosion | 79 | 0 | 0 | $1,761,758.00 |
| | Damage by Outside Forces | 91 | 0 | 5 | $2,674,843.00 |
| | Other | 27 | 9 | 29 | $2,014,129.00 |
| Totals: | | 258 | 9 | 35 | $11,115,774.00 |
| 85 | Construction/Material Failure | 18 | 0 | 1 | $2,346,975.00 |
| | Corrosion | 29 | 1 | 2 | $3,079,733.00 |
| | Damage by Outside Forces | 50 | 0 | 3 | $5,009,379.00 |
| | Other | 32 | 5 | 6 | $3,006,074.00 |
| Totals: | | 129 | 6 | 12 | $13,442,161.00 |
| NOTE: | Revisions were made in reporting requirements. | | | | |
| 86 | Construction/Material Failure | 15 | 0 | 5 | $1,663,092.00 |
| | Corrosion | 12 | 0 | 0 | $1,581,800.00 |
| | Damage by Outside Forces | 32 | 3 | 4 | $2,824,252.00 |
| | Other | 24 | 3 | 11 | $5,097,118.00 |
| Totals: | | 83 | 6 | 20 | $11,166,262.00 |
| 87 | Construction/Material Failure | 5 | 0 | 0 | $176,000.00 |
| | Corrosion | 22 | 0 | 2 | $1,100,658.00 |
| | Damage by Outside Forces | 26 | 0 | 2 | $1,622,808.00 |
| | Other | 17 | 0 | 11 | $1,821,000.00 |
| Totals: | | 70 | 0 | 15 | $4,720,466.00 |
| 88 | Construction/Material Failure | 9 | 0 | 0 | $651,000.00 |
| | Corrosion | 19 | 0 | 0 | $1,140,710.00 |
| | Damage by Outside Forces | 40 | 2 | 2 | $5,869,128.00 |
| | Other | 22 | 1 | 9 | $1,663,500.00 |
| Totals: | | 90 | 3 | 11 | $9,324,338.00 |
| 89 | Construction/Material Failure | 11 | 1 | 0 | $933,354.00 |
| | Corrosion | 31 | 0 | 0 | $1,856,558.00 |
| | Damage by Outside Forces | 35 | 13 | 10 | $7,558,811.00 |
| | Other | 25 | 8 | 18 | $10,025,820.00 |
| Totals: | | 102 | 22 | 28 | $20,374,543.00 |
| 90 | Construction/Material Failure | 21 | 0 | 3 | $1,693,048.22 |
| | Corrosion | 16 | 0 | 1 | $1,574,500.00 |
| | Damage by Outside Forces | 35 | 0 | 2 | $7,076,138.00 |
| | Other | 17 | 0 | 11 | $958,630.00 |
| Totals: | | 89 | 0 | 17 | $11,302,316.22 |
| 91 | Construction/Material Failure | 2 | 0 | 0 | $71,700.00 |
| | Corrosion | 16 | 0 | 0 | $1,845,224.00 |
| | Damage by Outside Forces | 38 | 0 | 4 | $2,910,013.81 |
| | Other | 16 | 0 | 8 | $7,109,300.00 |
| Totals: | | 72 | 0 | 12 | $11,936,237.81 |
| 92 | Construction/Material Failure | 7 | 0 | 2 | $4,986,100.00 |
| | Corrosion | 13 | 0 | 0 | $1,947,208.00 |
| | Damage by Outside Forces | 29 | 2 | 4 | $11,979,716.89 |
| | Other | 26 | 1 | 9 | $5,765,140.00 |
| Totals: | | 75 | 3 | 15 | $24,678,164.89 |

| YEAR | CAUSE | # INC | FAT | INJ | PRPTY |
|---|---|---|---|---|---|
| 93 | Construction/Material Failure | 15 | 0 | 1 | $6,704,834.00 |
| | Corrosion | 14 | 0 | 1 | $2,949,876.00 |
| | Damage by Outside Forces | 34 | 0 | 2 | $9,238,128.00 |
| | Other | 34 | 1 | 16 | $4,137,000.00 |
| Totals: | | 97 | 1 | 20 | $23,029,838.00 |

LIQUID ACCIDENTS - 1983 - 1993

| YEAR | CAUSE | # INC | FAT | INJ | PRPTY | LOSS |
|---|---|---|---|---|---|---|
| 83 | Corrosion | 44 | 0 | 0 | 114966.00 | 114188 |
| | Defective Pipe | 4 | 0 | 0 | 18533.00 | 6395 |
| | Defective Weld | 1 | 0 | 0 | 5800.00 | 6700 |
| | Equipment Rupturing Line | 52 | 6 | 4 | 459181.00 | 72251 |
| | Incorrect Operation | 9 | 0 | 0 | 8120.00 | 7058 |
| | Other | 52 | 0 | 5 | 4895583.00 | 178567 |
| | Totals: | 162 | 6 | 9 | 5502183.00 | 385159 |
| 84 | Corrosion | 49 | 0 | 0 | 25300.00 | 47404 |
| | Defective Pipe | 7 | 0 | 0 | 13915.00 | 5810 |
| | Defective Weld | 5 | 0 | 0 | 2060.00 | 1826 |
| | Equipment Rupturing Line | 49 | 0 | 16 | 689172.00 | 46699 |
| | Incorrect Operation | 10 | 0 | 0 | 10500.00 | 10646 |
| | Other | 66 | 0 | 1 | 1324069.00 | 60225 |
| | Totals: | 186 | 0 | 17 | 2065016.00 | 172610 |
| 85 | Corrosion | 54 | 0 | 1 | 1173069.00 | 19308 |
| | Equipment Malfunction | 2 | 0 | 0 | 29250.00 | 45 |
| | Equipment Rupturing Line | 40 | 1 | 3 | 324488.00 | 38215 |
| | Failed Pipe | 7 | 0 | 0 | 310000.00 | 10829 |
| | Incorrect Operation | 15 | 0 | 1 | 1619500.00 | 18523 |
| | Other | 52 | 4 | 13 | 1177255.00 | 34089 |
| | Outside Force Damage | 13 | 0 | 0 | 499085.00 | 8315 |
| | Totals: | 183 | 5 | 18 | 5132647.00 | 129324 |
| 86 | Corrosion | 54 | 0 | 2 | 2498978.00 | 8330 |
| | Equipment Malfunction | 2 | 0 | 0 | 200000.00 | 30 |
| | Failed Pipe | 13 | 0 | 0 | 528283.00 | 4541 |
| | Failed Weld | 8 | 2 | 1 | 1724962.00 | 2907 |
| | Incorrect Operation | 13 | 0 | 0 | 34261.00 | 6347 |
| | Other | 51 | 1 | 29 | 4618433.00 | 23369 |
| | Outside Force Damage | 69 | 1 | 0 | 6422929.00 | 31640 |
| | Totals: | 210 | 4 | 32 | 16027846.00 | 77164 |
| 87 | Corrosion | 70 | 0 | 0 | 5540581.00 | 18973 |
| | Equipment Malfunction | 8 | 0 | 1 | 201526.00 | 131 |
| | Failed Pipe | 15 | 0 | 0 | 942829.00 | 14645 |
| | Failed Weld | 6 | 0 | 3 | 348100.00 | 2369 |
| | Incorrect Operation | 10 | 0 | 2 | 581870.00 | 351 |
| | Other | 65 | 0 | 9 | 2315315.00 | 190289 |
| | Outside Force Damage | 63 | 3 | 5 | 3210213.00 | 85896 |
| | Totals: | 237 | 3 | 20 | 13140434.00 | 312654 |
| 88 | Corrosion | 56 | 1 | 0 | 3528271.00 | 22573 |
| | Equipment Malfunction | 7 | 0 | 0 | 101000.00 | 1558 |
| | Failed Pipe | 11 | 0 | 0 | 15033000.00 | 15522 |
| | Failed Weld | 6 | 0 | 0 | 230403.00 | 1040 |
| | Incorrect Operation | 13 | 0 | 3 | 224950.00 | 5888 |
| | Other | 48 | 0 | 8 | 885932.00 | 4975 |
| | Outside Force Damage | 54 | 1 | 8 | 3997006.00 | 67053 |
| | Totals: | 195 | 2 | 19 | 24000562.00 | 118609 |

| YEAR | CAUSE | # INC | FAT | INJ | PRPTY | LOSS |
|---|---|---|---|---|---|---|
| 89 | Corrosion | 34 | 0 | 0 | 572095.00 | 7009 |
| | Equipment Malfunction | 8 | 0 | 0 | 526020.00 | 2329 |
| | Failed Pipe | 13 | 0 | 0 | 766523.00 | 49755 |
| | Failed Weld | 7 | 0 | 0 | 343000.00 | 1973 |
| | Incorrect Operation | 10 | 0 | 3 | 203190.00 | 1754 |
| | Other | 48 | 1 | 3 | 2525014.00 | 19851 |
| | Outside Force Damage | 44 | 2 | 32 | 2502035.00 | 39702 |
| | Totals: | 164 | 3 | 38 | 7437877.00 | 122373 |
| 90 | Corrosion | 51 | 0 | 0 | 3149143.00 | 9949 |
| | Equipment Malfunction | 5 | 0 | 0 | 89400.00 | 512 |
| | Failed Pipe | 14 | 0 | 0 | 4266980.00 | 2482 |
| | Failed Weld | 5 | 0 | 0 | 412100.00 | 1607 |
| | Incorrect Operation | 9 | 0 | 0 | 156600.00 | 1270 |
| | Other | 58 | 3 | 7 | 3912029.00 | 13898 |
| | Outside Force Damage | 39 | 0 | 0 | 3764170.00 | 24950 |
| | Totals: | 181 | 3 | 7 | 15750422.00 | 54668 |
| 91 | Corrosion | 65 | 0 | 0 | 1959759.00 | 9417 |
| | Equipment Malfunction | 12 | 0 | 0 | 59978.00 | 205 |
| | Failed Pipe | 10 | 0 | 0 | 1927433.00 | 9295 |
| | Failed Weld | 15 | 0 | 0 | 8247500.00 | 2109 |
| | Incorrect Operation | 12 | 0 | 5 | 127973.00 | 1389 |
| | Other | 59 | 0 | 3 | 4233399.00 | 12485 |
| | Outside Force Damage | 47 | 0 | 1 | 8893831.00 | 20978 |
| | Totals: | 220 | 0 | 9 | 25449873.00 | 55878 |
| 92 | Corrosion | 47 | 0 | 0 | 18158778.00 | 12145 |
| | Equipment Malfunction | 10 | 0 | 0 | 2353250.00 | 2054 |
| | Failed Pipe | 11 | 0 | 0 | 1358166.00 | 3356 |
| | Failed Weld | 15 | 0 | 0 | 2876408.00 | 17831 |
| | Incorrect Operation | 15 | 0 | 2 | 1209766.00 | 677 |
| | Other | 77 | 5 | 28 | 4099203.00 | 10344 |
| | Outside Force Damage | 48 | 0 | 8 | 34329259.00 | 29720 |
| | Totals: | 223 | 5 | 38 | 64384830.00 | 76127 |
| 93 | Corrosion | 56 | 0 | 0 | 3128548.00 | 991 |
| | Equipment Malfunction | 11 | 0 | 0 | 435200.00 | 1422 |
| | Failed Pipe | 12 | 0 | 0 | 1959000.00 | 1373 |
| | Failed Weld | 6 | 0 | 0 | 3192054.00 | 4507 |
| | Incorrect Operation | 14 | 0 | 2 | 730195.00 | 10993 |
| | Other | 82 | 0 | 8 | 5071224.00 | 14198 |
| | Outside Force Damage | 58 | 0 | 1 | 14565876.00 | 27397 |
| | Totals: | 239 | 0 | 11 | 29082097.00 | 60881 |

## EXCESS FLOW VALVES

Mr. COLEMAN. As you know, the issue of excess flow valves has been on the NTSB's "Most Wanted" list for a number of years. On December 14, 1993, a consensus group, which included the gas industry, manufacturers and safety parties, submitted to RSPA joint comments on excess flow valves as an alternative to the RSPA proposed rule. How and when does RSPA plan to address the joint comments?

[The information follows:]

By later this summer, RSPA plans to publish a supplemental NPRM proposing an alternative to the original proposals in the NPRM. The proposals suggested by the consensus group would provide more flexibility in the use of excess flow valves. The supplemental NPRM will point out the differences between the NPRM and the alternative proposal and request public comments on the safety merits of the alternative proposal. Upon receiving public comment, RSPA will consider the responses received from both the NPRM and supplemental NPRM and decide what, it any, requirements to adopt in a final rule.

Mr. COLEMAN. According to the joint comments of the consensus group on the excess flow valve regulation:

"Much of the information necessary to accurately assess the costs and benefits of excess flow valves is incomplete or unavailable. Therefore, we support a cooperative effort between the American Gas Association and excess flow valve manufacturers to begin collecting data on the in-service performance of the approximately one million excess flow valves that will be installed annually . . ."

If data on the costs and benefits of excess flow valves are limited, how is RSPA proceeding with its cost/benefit analysis of the proposed regulations?

[The information follows:]

RSPA supports the cooperative effort between the American Gas Association and excess flow valve manufacturers as a viable means of assuring the collection of accurate data on which to perform a cost/benefit analysis.

RSPA is utilizing all available information, including about 10 years of selective use of excess flow valves by some operators, in analyzing the benefit/cost of the proposed final regulations. The draft benefit/cost regulatory evaluation will be updated after publication of the supplemental notice of proposed rulemaking and review of the comments submitted to the docket. These will form the basis, if any, for a final rule.

Mr. COLEMAN. According to press reports, the Panhandle Eastern Company does not use automatic shut-off valves or remotely controlled valves to shut off the flow of gas in the case of a pipeline leak. If this is accurate, would such emergency devices have been beneficial in the New Jersey accident?

[The information follows:]

In March 1991, the Department issued a study "Emergency Flow Restricting Devices Study" which concluded that automatic shut-off valves for pipelines are unreliable because of their inability to distinguish between a leak and normal operation fluctuations. A false closure on a gas pipeline can result in a potentially hazardous situation due to service interruption, particularly in very cold regions of the country.

RSPA also investigated installing remotely controlled emergency valves on gas transmission pipelines and found no significant benefit because:

First, rapid isolation of a failed section of a transmission pipeline probably would not reduce accident effects because ignition would be likely to occur before all the pressurized gas in the isolated section escaped.

Second, if there is no nearby ignition source the natural gas, which is lighter than air, will dissipate rapidly rather than form a pool as would many hazardous liquid materials.

Third, isolating a pipeline section containing a leak in an unpopulated area may require cutting off the gas to distribution customers which may be hazardous if: (1) customers are missed when relighting pilot lights, thereby allowing gas to enter the customer's premises; and (2) customers are denied heat in very cold winter regions of the country.

Notwithstanding these findings, the issue of valve spacing and remotely controlled valves on gas transmissions pipelines is being reassessed by RSPA as a result of the Texas Eastern failure in New Jersey. This issue is being addressed in our comprehensive inspection of the interstate gas transmission pipelines in New Jersey. In addition, we will consider the issue as part of a multi-year study contract, which may be awarded as soon as May 1994, concerning the safety of high pressure pipelines located in areas of high population and other high risk areas.

## SMART PIG PIPELINES

Mr. COLEMAN. Last week, a final rule that would require that new and replacement gas and liquid pipelines be constructed to accommodate the passage of "smart pig" devices was published. When will pipeline operators have to comply with the new requirements?

[The information follows:]

Pipeline operators must begin complying with this rule on May 12, 1994.

## REGULATION OF GAS STORAGE

Mr. COLEMAN. In November 1993, the Transportation Safety Board issued its report concerning the April 7, 1992 underground storage cavern explosion in Brenham, Texas. That accident killed three people and injured another 21 people.

The Safety Board concluded that the lack of Federal and State regulations governing the design and operation of underground storage systems contributed to the accident.

What is RSPA's response to the Safety Board's recommendation that the Office of Pipeline Safety should amend its natural gas pipeline safety regulations to specifically include safety standards on underground natural gas storage facilities.

Please provide a copy of RSPA's response.

[The information follows:]

As a first step, RSPA is inviting representatives of industry, state and local government, and the public to an open meeting on underground storage of gas and hazardous liquids. The meeting will be held in Houston, Texas in July 1994. The purpose of this meeting is to gather information on the extent of current regulation, and to help determine the proper action for RSPA to take regarding federal regulation of underground storage of gas and hazardous liquids.

Anticipated topics and questions (which will be listed in a future Federal Register notice) to be discussed by commenters at the meeting include the following:

1. A description of the types of storage configurations and the problems and risks associated with each.
2. Should federal regulations be issued to address the potential hazards of underground storage of gas and hazardous liquids?
3. Would referencing (in the regulations) API RP 1114 and 1115 and other standards under development solve the problems?
4. If regulations are needed, should RSPA or the states issue regulations governing underground storage? Should both gas and hazardous liquids be regulated?
5. If regulations are needed, should the regulations cover only surface requirements: i.e., equipments, O&M and safety procedures? Or, should both surface and subsurface regulations be issued?
6. Which states have (1) jurisdiction and (2) regulations covering underground storage projects?

A copy of RSPA's March 24, 1994, response to NTSB follows:

U.S. Department
of Transportation
**Research and
Special Programs
Administration**

The Administrator

400 Seventh Street, S.W.
Washington, D.C. 20590

MAR 24 1994

The Honorable Carl W. Vogt
Chairman
National Transportation Safety Board
490 L'Enfant Plaza East, S.W.
Washington, DC 20594

Dear Chairman Vogt:

This acknowledges your letter of December 15, 1993, regarding National Transportation Safety Board Safety Recommendation P-93-9 to the Research and Special Programs Administration that reads as follows:

> Develop safety requirements for storage of highly volatile liquids and natural gas in underground facilities, including a requirement that all pipeline operators perform safety analyses of new and existing underground geologic storage systems to identify potential failures, determine the likelihood that each failure will occur, and assess the feasibility of reducing the risk; require that operators incorporate all feasible improvements.
> (Class II, Priority/Action)

The safety of underground storage facilities is of concern to us. Our first action on this issue will be to conduct a public meeting with industry trade associations, state agencies, operators of underground storage facilities, and other interested parties to identify and discuss the safety and environmental issues of underground storage. We hope to have participation by your staff at this meeting.

We appreciate the encouragement from the NTSB on the Risk Assessment Priority process expressed in your December 15 letter. As you know, the Risk Assessment Prioritization process ranks actions that could be taken by the Office of Pipeline Safety according to their potential for reducing the risk of pipeline failure. This process is necessary to allocate limited resources to address the most pressing safety and environmentally sensitive problems.

In the interest of appropriate and correct placement in our agenda, Safety Recommendation P-93-9 will be included in the Risk Assessment Prioritization program.

Future action with respect to Safety Recommendation P-93-9 is dependent on the results of the public meeting and risk assessment.

Sincerely,

Ana Sol Gutiérrez
Acting Administrator

### PIPELINE SAFETY RULEMAKINGS

Mr. COLEMAN. Please update the listing of all outstanding pipeline safety rulemakings, listing their docket number, title, current phase, and scheduled completion dates as shown on page 854 of last year's hearing record.

Please also designate any requirement of the 1992 or 1988 Pipeline Safety Acts.

[The information follows:]

| Docket No. | Title | Current Phase | Scheduled Completion Date |
|---|---|---|---|
| PS-94[2] | Qualifications of Pipeline Personnel | Proposed rule | 7/94 |
| PS-101 | Excavation Damage Prevention Programs for Gas and Hazardous Liquid Pipelines | Final rule and NPRM for mandatory participation in one-call systems | 6/94 |
| PS-106 | Transportation of Hydrogen Sulfide by Pipeline | Withdraw proposed rule | 10/94 |
| PS-107 | Determining the Extent of Corrosion on Exposed Gas Pipelines | Final rule | 9/94 |
| PS-117[2] | Hazardous Liquid Pipelines Operating at 20% or less of SMYS | Final rule | 6/94 |
| PS-118[2] | Excess Flow Valve Installation on Service Lines | Supplemental NPRM | 6/94 |
| PS-121 | Pressure Testing of Certain Hazardous Liquid Pipelines (renamed) | Final rule | 6/94 |
| PS-122 | Gas Gathering Line Definition | Supplemental NPRM | 10/94 |
| PS-124 | Regulatory Review: Gas Pipeline Safety Standards | Final rule | 10/94 |
| PS-125 | Regulatory Review: Administrative Practices, Reporting Pipeline Incidents, Gas Pipeline Standards, and Liquefied Natural Gas Facility Standards | Final rule | 10/94 |
| PS-127 | Regulatory Review:Hazardous Liquid and Carbon Dioxide Pipeline Safety Standards | Final rule | 7/94 |

| | | | |
|---|---|---|---|
| PS-130 | Response Plans for Onshore Oil Pipelines | Final rule | 7/94 |
| PS-135[2] | Customer-Owned Service Lines Notification[4] | Final rule | 10/94 |
| o[1,2,3] | Maps and Records of Pipeline Location and Characteristics: Notification of State Agencies, Pipeline Inventory | Proposed rule | 6/94 |
| o[3] | Distribution Systems Definitions | Proposed rule | None |
| o[3] | Design and Construction of Welded Breakout Tanks | Proposed rule | None |
| o[3] | Nomenclature Changes in Agency Procedural Rules | Action terminated | 12/93 |
| o[2,3] | Increased Inspection Requirements | Proposed rule | 10/94 |
| o[2,3] | Emergency Flow Restriction Devices / Leak Detection Systems | Proposed rule | 9/94 |
| o[2,3] | Liquid Gathering Line Definition | Proposed rule | 4/95 |
| o[2,3] | Excess Flow Valves; Customer Notification | Proposed rule | 4/95 |
| o[2,3] | Underwater Inspection of Offshore Pipelines | Proposed rule | 10/94 |
| o[2,3] | Underwater Abandoned Pipeline Facilities | Proposed rule | 7/94 |
| o[2,3] | Regulated Gas/Liquid Gathering Line Definition | Proposed rule | 10/95 |
| o[2,3] | Reporting Environmental Hazards | Proposed rule | None |
| o[2,3] | Environmentally Sensitive Area, High Density Population Area, and Navigable Waterway Definitions | Proposed rule | 10/94 |

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[1] Required by Pipeline Safety Reauthorization Act of 1988
[2] Required by Pipeline Safety Act of 1992
[3] Docket number not yet assigned
[4] Previously titled "Yard Lines"

## GAS PIPELINE PERFORMANCE-ORIENTED RECOMMENDATIONS

Mr. COLEMAN. The National Association of Pipeline Safety Representatives completed its review of performance-oriented requirements in OPS's gas pipeline regulations and recommended that OPS initiate approximately 20 new regulatory changes. Please highlight the most significant recommendations generated from its review.

[The information follows:]

1. **§ 192.361 Service lines: Installation** - NAPSR recommended that this regulation prohibit the installation of tracer wire in contact with plastic pipe, except where impractical. Currently, plastic pipe must be installed with tracer wire or other means of locating the pipe, but in some instances contact between wire and pipe has caused lightning damage to the pipe.

2. **§ 192.457 External corrosion control: Buried or submerged pipelines installed before August 1, 1971** - NAPSR recommended that this regulation provide a more definitive standard for the circumstances in which methods other than electrical survey may be used to detect areas of active corrosion. Although electrical survey is preferred, methods other than electrical survey, such as review of corrosion and leak history records, are widely used with uncertain results, especially in urban areas.

3. **§§ 192.483 and 192.487 Remedial measures: General** - NAPSR recommended that these regulations reference industry codes and standards for use in determining whether pipelines with areas of "generalized corrosion" must be replaced. Currently, small areas of general corrosion may be corrected by means other than replacement.

4. **§ 192.614 Damage prevention program** - NAPSR recommended that this regulation provide more definitive guidance regarding the frequency at which operators must notify the public and known excavators of the details of their excavation damage prevention programs. Currently, notice must be given "as often as needed."

5. **§ 192.615 Emergency plans** - NAPSR recommended that this regulation require operators to treat public reports of gas odor inside or near a building as an emergency. Currently, in such situations, only after gas has been "detected" must the operator provide emergency response.

Mr. COLEMAN. Last year, RSPA told us that there was a backlog of 32 pipeline safety rulemakings, including eight rules mandated under the Pipeline Safety Act that had not yet been initiated. What progress have you made since then in reducing your backlog of pipeline safety rulemakings?

What significant final rules were issued in 1993?

[The information follows:]

Our top priority has been acting on the environmental action plan following the Colonial spill. However, as shown below, since last year's hearing we have taken several rulemaking actions and reduced the backlog. We issued nine final rules, including four significant rules, two of which were issued in 1993. These two were "Response Plans for Onshore Oil Pipelines" and "Drug Testing; Management Information System."

*Issued one ANPRM*:

01/19/94—Emergency Flow Restricting Devices.

*Issued five NPRMs*:

03/03/93—Low Stress Hazardous Liquid Pipelines.
04/21/93—Excess Flow Valves.
08/18/93—Pipeline User Fees.
02/03/94—Customer-Owned Service Lines.

*Issued nine Final Rules*:

01/09/93—Response Plans for Onshore Oil Pipelines.[1] [2]
02/23/93—Allocation Formula for State Grants.
03/18/93—Update of Standards Incorporated by Reference.
09/16/93—Gas Detection and Monitoring in Compressor Station Building.
10/22/93—Leakage Surveys.
12/23/93—Drug Testing; Management Information System[2]
02/11/94—Operation and Maintenance Plans[2]
02/15/94—Alcohol Misuse Prevention Programs[2]
04/24/94—Passage of Instrumented Internal Inspection Devices.

## SIGNIFICANT PIPELINE REGULATIONS

Mr. COLEMAN. Please identify the three most significant pipeline regulations that RSPA plans to finalize during fiscal year 1995, and indicate why they are important.

[The information follows:]

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[1] Interim final rule.

[2] Significant rule under DOT procedures.

| | Pipeline Regulation | Why Important |
|---|---|---|
| 1 | Excess Flow Valve Installation on Service Lines | Despite the growing availability and use of "one-call" damage prevention programs, many accidents still occur on service lines due to dig-ins and other causes. We studied the service line accidents reported between 1984 and 1990 and concluded that well over half of them might have been prevented or mitigated if an excess flow valve had been installed on the line. |
| 2 | Increased Inspection Requirements | Recent accidents on Exxon, Colonial, and Panhandle Eastern pipelines have demonstrated the devastating consequences that undetected time-dependent defects can have on nearby communities and the environment. Periodic inspection of gas transmission and hazardous liquid lines by smart pigs or equivalent means could detect critical defects and allow time for their removal before line failures occur. |
| 3 | Define High-Density Population Area, Environmentally-Sensitive Area, and Navigable Waterway | Pipelines pose a greater risk in densely populated areas, areas of environmental concern, and at crossings of navigable waterways. We need unambiguous definitions of these areas to create building blocks for more stringent, cost-effective safety and environmental protection requirements. |

## PIPELINE SAFETY STAFFING/WORKLOAD

Mr. COLEMAN. RSPA is requesting three additional positions and full-time equivalents for fiscal year 1995 for increased inspections of low-stress liquid pipelines and new pipeline construction. How do these inspection priorities fit into your risk-based inspection program?

[The information follows:]

Initially, the new low-stress pipeline operators that will come under RSPA jurisdiction will be treated as a separate block of inspection units. OPS will inform those operators of their pending jurisdictional status and the time allotted to come into compliance with the rule. Second, assistance will be provided for them to understand the requirements of the rules. Then, based on the date compliance is required by the rule, inspections will begin on a high priority basis.

## PIPELINE SAFETY WORKLOAD MEASURES

Mr. COLEMAN. Please update the workload measures for the Office of Pipeline Safety on pages 860–861 of last year's hearing record.

[The information follows:]

## ENFORCEMENT

| Measures: | 1995* | 1994* | 1993 | 1992 | 1991 |
|---|---|---|---|---|---|
| Cases Opened | 170 | 150 | 129 | 94 | 77 |
| Standard Insp. | 425 | 400 | 336 | 344 | 225 |
| Accident investigations | 60 | 54 | 49 | 37 | 24 |

Proposed Civil Penalties:

| Estimated | | | Actual | |
|---|---|---|---|---|
| 1995 | 1994 | 1993 | 1992 | 1991 |
| $1,700,00+ | $1,500,000+ | $1,217,300 | $1,133,100 | $1,310,300 |

Civil Penalties Collected:

| Estimated | | Actual** (Closed Cases Only) | | |
|---|---|---|---|---|
| 1995 | 1994 | 1993 | 1992 | 1991 |
| $1,200,000 | $1,000,000+ | $748,150 | $802,740 | $218,300 |

## TRAINING

| | 1995 | 1994 | 1993 | 1992 | 1991 |
|---|---|---|---|---|---|
| Classes | 20 | 21 | 17 | 16 | 13 |
| Seminars | 27 | 27 | 16 | 24 | 17 |
| Students | 3,677 | 3,733 | 2,250 | 3,110 | 2,711 |

## OUTREACH/NARUC AND NAPSR CONFERENCES

| | | | | | |
|---|---|---|---|---|---|
| Conferences | 8 | 8 | 3*** | 8 | 8 |
| Participants | 200 | 180 | 180 | 170 | 170 |

*Estimated.

**Amounts prior to 1992 reflect monies collected for closed cases only. Due to improvements in our enforcement database and accounting process we will have the capability to report all monies collected.

***Five regional NAPSR meetings consolidated into one meeting.

STATE COMPLIANCE ACTIVITIES -- NATURAL GAS PROGRAM

| | 1992 | 1991 | 1990 | 1989 |
|---|---|---|---|---|
| No. of Operators | 10,461 | 11,153 | 7,882 | 7,575 |
| No. of Operators Inspected | 6,183 | 5,032 | 4,614 | 4,597 |
| No. of Inspection Units | 13,312 | 14,021 | 10,082 | 10,509 |
| No. of Inspection Units Inspected | 8,252 | 7,105 | 6,601 | 6,860 |
| No. of Inspectors* | 251 | 257 | 242 | 233 |
| Person Days Spent on Inspections | 26,077 | 26,828 | 24,510 | 23,113 |
| No. of Noncompliances Found | 19,614 | 19,517 | 17,238 | 15,119 |
| Enforcement Actions Initiated | 3,220 | 3,394 | 4,247 | 2,888 |

STATE COMPLIANCE ACTIVITIES -- HAZARDOUS LIQUID PROGRAM

| | | | | |
|---|---|---|---|---|
| No. of Operators | 250 | 245 | 200 | 255 |
| No. of Operators Inspected | 183 | 188 | 186 | 137 |
| No. of Inspection Units | 400 | 405 | 332 | 420 |
| No. of Inspection Units Inspected | 281 | 273 | 260 | 209 |
| No. of Inspectors* | 73 | 71 | 59 | 62 |
| Person Days Spent on Inspections | 1,754 | 1,698 | 1,571 | 1,276 |
| No. of Noncompliances Found | 975 | 659 | 697 | 589 |
| Enforcement Actions Initiated | 160 | 113 | 238 | 86 |

*Some inspectors may be counted under both gas/liquid programs

REGULATORY DEVELOPMENT

| | 1995 Est. | 1994 Est. | 1993 | 1992 | 1991 |
|---|---|---|---|---|---|
| ANPRM | 2 | 2 | 1 | 1 | 1 |
| NPRM | 6 | 5 | 4 | 7 | 5 |
| FR | 7 | 6 | 5 | 0 | 5 |
| STATE WAIVERS | 4 | 3 | 2 | 1 | 4 |
| FEDERAL WAIVERS | 4 | 3 | 2 | 0 | 0 |
| TECHNICAL STUDIES | 4 | 2 | 3 | 1 | 1 |
| INTERPRETATIONS | 18 | 15 | 14 | 10 | 11 |
| ALERT NOTICES/ADVISORY BULLETINS | 10 | 10 | 6 | 3 | 4 |
| NTSB RECOMMENDATIONS CLOSED | 7 | 5 | 4 | 3 | 3 |

## PIPELINE CIVIL PENALTY ACTIONS

Mr. Coleman. Please update the tables on civil penalty actions assessed and collected as shown on pages 864–865 of last year's hearing record.

[The information follows:]

## Tables on OPS Civil Penalty Actions Assessed and Collected

| YEAR | NUMBER | AMOUNT PRELIMINARILY ASSESSED | NUMBER | AMOUNT COLLECTED |
|---|---|---|---|---|
| 1977 | 7 | $16,400 | 1 | $ 700 |
| 1978 | 23 | 70,200 | 6 | 8,500 |
| 1979 | 20 | 46,450 | 21 | 26,800 |
| 1980 | 29 | 60,500 | 35 | 55,300 |
| 1981 | 6 | 14,750 | 4 | 7,250 |
| 1982 | 2 | 16,000 | 2 | 3,000 |
| 1983 | 3 | 21,000 | 5 | 19,500 |
| 1984 | 1 | 2,750 | 5 | 6,000 |
| 1985 | 8 | 12,000 | 11 | 56,500 |
| 1986 | 7 | 393,000 | 6 | 113,300 |
| 1987 | 20 | 641,500 | 9 | 391,000 |
| 1988 | 53 | 775,650 | 21 | 79,950 |
| 1989 | 45 | 512,950 | 30 | 102,300 |
| 1990 | 46 | 431,440 | 24 | 305,000 |
| 1991 | 58 | 1,310,300 | 36 | 218,300 |
| 1992 | 69 | 1,133,100 | 72 | 802,740 |
| 1993 | 75 | 1,217,300 | 69 | 748,150 |

| YEAR | AVERAGE AMOUNT PRELIMINARILY ASSESSED | AVERAGE AMOUNT COLLECTED |
|---|---|---|
| 1977 | $ 2,342 | $ 700 |
| 1978 | 3,052 | 1,416 |
| 1979 | 2,322 | 1,276 |
| 1980 | 2,086 | 1,580 |
| 1981 | 2,458 | 1,812 |
| 1982 | 8,000 | 1,500 |
| 1983 | 7,000 | 3,900 |
| 1984 | 2,750 | 1,200 |
| 1985 | 1,500 | 5,136 |
| 1986 | 56,142 | 18,883 |
| 1987 | 32,075 | 43,444 |
| 1988 | 14,363 | 3,807 |
| 1989 | 11,399 | 3,410 |
| 1990 | 9,379 | 12,708 |
| 1991 | 22,591 | 6,064 |
| 1992 | 16,422 | 11,149 |
| 1993 | 16,231 | 10,843 |

## Table of OPS Enforcement Actions

| YEAR | ENFORCEMENT ACTIONS BY OPS | NUMBER OF WARNING LETTERS | PERCENT OF WARNING LETTERS |
|---|---|---|---|
| 1986 | 120 | 99 | 82.5 |
| 1987 | 99 | 60 | 60.6 |
| 1988 | 80 | 15 | 18.8 |
| 1989 | 88 | 27 | 30.7 |
| 1990 | 94 | 31 | 32.9 |
| 1991 | 114 | 23 | 20.1 |
| 1992 | 150 | 56 | 37.3 |
| 1993 | 178 | 49 | 27.5 |

| YEAR | NUMBER OF PROPOSED CIVIL PENALTIES | AMOUNT |
|---|---|---|
| 1986 | 7 | $ 393,000 |
| 1987 | 20 | 641,000 |
| 1988 | 53 | 775,650 |
| 1989 | 45 | 512,950 |
| 1990 | 46 | 431,440 |
| 1991 | 58 | 1,310,300 |
| 1992 | 69 | 1,133,100 |
| 1993 | 75 | 1,217,300 |

## PIPELINE SAFETY ENFORCEMENT

Mr. COLEMAN. For each of fiscal years 1993 and 1992, please specify the average time that was spent processing enforcement cases in regional offices before they were submitted to headquarters, the time spent reviewing these cases at headquarters, and the time lapsed between the submittal of these cases to the Office of Chief Counsel and their final settlement.

[The information follows:]

| *Stage of penalty process* | *Average Days* |
|---|---|
| Inspection date to notice of probable violation (NOPV) date | 165 |
| Receipt of violator's response to referral to office of chief counsel (OCC) | 39 |
| Receipt by OCC to final order date | 251 |
| Total days from inspection date to final order date | 542 |
| NOPV date to close | 578 |

The average time spent processing enforcement cases is based on information from November 1990 to March 1992 as issued in Inspector General's report December 1992.

## ONSHORE PIPELINE FACILITY INSPECTIONS

Mr. COLEMAN. Please update the data on the number of comprehensive onshore pipeline facility inspections by fiscal year as shown on page 866 of last year's hearing record by providing actual and estimated data for fiscal years 1993 through 1995.

[The information follows:]

| Year: | *Standard Inspection Onshore* |
|---|---|
| 1990 | 180 |
| 1991 | 225 |
| 1992 | 307 |
| 1993 | 304 |
| 1994 (Est) | 309 |
| 1995 (Est) | 460 |

Based on expected FTE's × 20 inspections per year.

Mr. COLEMAN. How many such inspections have been accomplished to date this fiscal year and compared to the same time period in fiscal year 1993?

[The information follows:]

| | Fiscal year— | |
|---|---|---|
| | 1993 10/01/92— 04/20/93 | 1994 10/01/93— 04/20/94 |
| Central | 11 | 14 |
| Eastern | 19 | 9 |
| Southwest | 35 | 24 |
| Southern | 32 | 15 |
| Western | 30 | 13 |
| Total | 127 | 75 |

While the number of inspections conducted has decreased from 127 to 75, the number of accident investigations has increased from 37 to 49.

## PIPELINE INSPECTION INTERVALS

Mr. COLEMAN. Please update the data on estimated inspection intervals by federal region for onshore units as shown on page 867 of last year's hearing record and explain any large differences.

[The information follows:]

*Calculated pipeline inspection intervals* [1]

| *Region* | *Year* |
|---|---|
| Eastern | 2.3 |
| Southern | 2.1 |
| Central | 2.3 |
| Southwest | 3.1 |
| Western | 2.2 |

[1] The listed inspection cycle is a calculation based on each available FTE performing 20 standard inspection per year, which is our annual inspector goal.

Reviewing actual onshore inspections performed in 1993, the inspection interval extends to a national average of 4.5 years.

## OFF-SHORE PIPELINES

Mr. COLEMAN. What progress has been made in the last year regarding new safety regulations pertaining to off-shore pipeline operators?

[The information follows:]

During the past year, the RSPA has been awaiting the completion of a report being prepared by the Marine Board of the National Research Council before proceeding with rulemaking. The report "Improving the Safety of Marine Pipelines," to be published in May 1994, was co-sponsored by RSPA and the Minerals Management Service. It will include guidance regarding the mandate in the Pipeline Reauthorization of 1990 that RSPA adopt regulations to establish a mandatory, systematic, and, where appropriate, periodic inspection program of offshore pipeline facilities in the Gulf of Mexico.

## OFFSHORE INSPECTION RESOURCES

Mr. COLEMAN. Please update the data on inspection resources dedicated to off-shore pipelines, as shown on page 857 of last year's hearing record.

[The information follows:]

| Region | Fiscal year— | | | | |
|---|---|---|---|---|---|
| | 1991 | 1992 | 1993 | 1994 | 1995 |
| Eastern | 0 | 0 | 0 | 0 | 0 |
| Southern | 0 | 0 | 0 | 0 | 0 |
| Central | 0 | 0 | 0 | 0 | 0 |
| Southwest | 1.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Western | .50 | .50 | .50 | .50 | .50 |
| TOTAL | 1.50 | 2.50 | 2.50 | 2.50 | 2.50 |

The Southern Region offshore units (7) may or may not be inspected in a given year. Therefore, the .03 FTE figure previously included for 1990 and 1992 has been removed from the table.

## PIPELINE SAFETY INSPECTION UNITS

Mr. COLEMAN. Please provide a table that shows the number of inspection units that have not been inspected as required by OPS headquarters guidance by region and the year of the last inspection.

[The information follows:]

The headquarters guidance for the risk-based inspection planning process requires that the top ⅓ of inspections planned for each year be selected strictly on a risk basis. These high priority inspections have been completed in all regions in all years since the risk-based inspection program has been in place. A risk-based inspection program, by its very nature, does not evenly distribute resources over all inspection units. Some units may be inspected far more frequently than others. The date of last inspection becomes a primary factor in the scheduling of the remaining ⅔ of the units in the annual inspection plan. Inspection interval goals are secondary planning factors in a risk-based planning process.

| Region | No. of operators beyond inspection cycle guidelines | Years of last inspection |
|---|---|---|
| Eastern | 18 | 1987–1991 |
| Central | 46 | 1988–1991 |
| Southern | 3 | 1989 |
| Southwest | 16 | 1987–1992 |
| Western | 14 | 1987–1989 |

Mr. COLEMAN. The justifications indicate that you project a 38 percent increase in the number of standard inspections between fiscal years 1993 and 1995. How will you be able to achieve such an increase?

[The information follows:]

The 38 percent increase in the number of standard inspections projected between 1993 and 1995 reflects an increase in the number of inspectors available to conduct the inspections as a result of hiring the additional inspectors appropriated in fiscal year 1993 and having those new inspectors fully qualified to take on a full inspection load. In the past, accident investigations, remediation testing, and special projects, such as response to the Midwest floods and California earthquake, have hampered efforts to attain our inspection goals. These factors cannot, of course, be accurately predicted.

Mr. COLEMAN. During the same time period, you project no increase in the actual number of pipeline units inspected. What is the reason for that?

[The information follows:]

The "pipeline units" in the Inspector Workload indicators in our fiscal year 1995 budget refers to the number of inspection units in existence across the country that are under the OPS inspection jurisdiction, not the number of inspection units *to be inspected.* The number of inspection units to be inspected (not shown in the workload indicators) would, of course, increase with the increase in standard inspections conducted.

## PIPELINE INSPECTORS

Mr. COLEMAN. How many pipeline inspectors are currently on board in each region and how does that compare with a year ago?

[The information follows:]

| | Fiscal year— | |
|---|---|---|
| | 1993 | 1994 |
| Eastern | 3 | 3 |
| Southern | 3 | 4 |
| Central | 5 | 5 |
| Southwest | 6 | 7 |
| Western | 5 | 6 |
| Headquarters (Drug and Alcohol) | 1 | 2 |
| Total | 23 | 27 |

We currently have a total of 27 inspectors on board, which is four more than last year. We are now in the process of hiring three inspectors within the next few months, and expect to have all positions filled by the end of the fiscal year.

## NEW INSPECTOR POSITIONS

Mr. COLEMAN. What assumptions were made regarding the salaries and benefits budgeted for the three new inspector positions requested in fiscal year 1995?

[The information follows:]

The assumptions were based on three inspectors hired at an annual rate $70,756 each which includes benefits of 25 percent. The total amount allocated for this is $212,268.

## INSPECTOR TRAVEL COSTS

Mr. COLEMAN. What was actually spent in travel costs per inspector and regional director in fiscal year 1993, and what is budgeted in each fiscal years 1994 and 1995?

[The information follows:]

Approximately $12,000 was spent in travel costs per inspector and regional director in fiscal year 1993. In fiscal year 1994, about $15,000 has been estimated for inspector and regional director travel. The fiscal year 1995 request has been estimated at the same level as the fiscal year 1994 request.

## PIPELINE INSPECTORS BY REGION—ONSHORE

Mr. COLEMAN. Please update the breakdown of your on-shore pipeline safety inspectors and pipeline facilities by federal region as shown on page 868 of last year's hearing record.

[The information follows:]

| | FTE's | Number of onshore inspection units |
|---|---|---|
| Eastern | 3.0 | [2] 138 (35) |
| Southern | 3.0 | 170 (50) |
| Central | 5.0 | 272 (92) |
| Southwest [1] | 5.0 | 249 (6) |
| Western [1] | 5.5 | 247 (51) |
| Headquarters (Drug and alcohol) | 1.0 | ........ |

[1] Additional inspectors are also assigned to offshore inspections.

[2] ( ) Intrastate and interstate units inspected by state agents with enforcement by OPS.

## PIPELINE INSPECTORS BY REGION—OFF-SHORE

Mr. COLEMAN. Please update the same data for off-shore pipeline facilities and staff resources as shown on page 868 of last year's hearing record.

[The information follows:]

| Region | No. of FTE's | No. of offshore pipeline facilities |
|---|---|---|
| Eastern | 0 | 0 |
| Southern | 0 | 7 |
| Central | 0 | 0 |
| Southwest | 2 | 218 |
| Western | 0.5 | 24 |

## AUTHORIZED PIPELINE INSPECTORS BY REGION

Mr. COLEMAN. Please provide a table that provides a breakdown of authorized pipeline inspectors by region for fiscal years 1993 and 1994 and planned for fiscal year 1995.

[The information follows:]

| Region | Fiscal year— 1993 | 1994 | 1995 |
|---|---|---|---|
| Eastern | 4 | 4 | 5 |
| Central | 6 | 6 | 6 |
| Southern | 4 | 4 | 4 |
| Southwest | 6 | 7 | 8 |
| Western | 6 | 7 | 8 |
| Headquarters (Drug and Alcohol) | 1 | 2 | 2 |
| Total | 27 | 30 | 33 |

## STATE LIAISON POSITIONS

Mr. COLEMAN. What will be the specific responsibilities of the state liaison positions and does each region now have such a person?

[The information follows:]

The specific responsibilities of the state liaison positions include monitoring state program performance, assuring that grants are being managed to maximize performance, facilitating state adoption of federal requirements, providing program advice and technical guidance, conducting significant inspections and accident investigations (particularly those done in conjunction with state inspectors), and encouraging program development and adjustments within individual states to achieve a nationally uniform program to the degree possible.

We have filled the state liaison positions in the Southern, Southwest, and Western Regional Offices and expect to fill the other two positions within the year.

## TRANS-ALASKA PIPELINE

Mr. COLEMAN. The justifications indicate that RSPA proposes to establish a district office in Anchorage operating under the supervision of the Western Regional Office in Denver. How would safety oversight over the Trans-Alaska pipeline be improved by the establishment of an Alaska district office when RSPA already has staff assigned to the Joint Pipeline Office in Alaska?

[The information follows:]

Today the one inspector in Anchorage must divide his time between the Trans-Alaska pipeline and all other pipeline operators in Alaska. The establishment of a district office would increase the staff in Alaska so that all pipelines in the state could be inspected on an improved schedule.

The establishment of a district office in Anchorage is designed to formalize and provide structure for the ongoing assignment of staff in Alaska. At present, the inspector assigned to Alaska operates as a staff inspector for the OPS Western Region Office, with little direct authority to make the difficult, and often immediate, decisions that have to be made in executing OPS authority and in fully supporting the multi-agency Joint Pipeline Office (JPO). In addition, much of the support for the inspector comes from the JPO, and, as such, OPS is dependent upon support it does not control. With 32 inspection units in Alaska, in addition to the Trans-Alaska Pipeline, OPS needs to have a fixed presence in Alaska given the critical environmental sensitivity of all areas through which pipelines operate and the fact that OPS administers a full complement of regulatory and compliance tools.

Mr. COLEMAN. According to your justifications, the Trans-Alaska Pipeline requires more oversight by OPS than any other pipeline in the nation. Why is that the case when you share safety oversight over the pipeline with the Bureau of Land Management in the Department of the Interior?

[The information follows:]

The level of oversight of the Trans-Alaska pipeline is appropriate given the economic importance and environmental sensitivity of this pipeline system. OPS is responsible for inspection and compliance under the hazardous liquid pipeline safety regulations for the entire system. OPS is an active partner in the Joint Pipeline Office with BLM and the state, each of whom has jurisdiction through permits and right-of-way agreements for only one-half of the pipeline. OPS and BLM responsibilities do not overlap.

Mr. COLEMAN. What are RSPA's responsibilities with regard to the Trans-Alaska Pipeline and how do they differ with those of the Bureau of Land Management in the Department of the Interior?

[The information follows:]

RSPA administers the full range of regulatory and compliance tools under the hazardous liquid pipeline safety regulations for the entire 800-mile system, including the mainline pipe, the fuel gas line, all mainline breakout tanks, breakout tanks at the Valdez Marine Terminal (VMT), and the lines in the VMT that carry oil to the vessel loading arms. The Bureau of Land Management administers its oversight through the provisions in the permits and right-of-way agreement it has executed for protection of federal lands of that portion of the system on federal land (approximately one-half of the system).

Mr. COLEMAN. Is the establishment of an Alaska district office justified under OPS's risk-based inspection program?

[The information follows:]

Yes. The 32 inspection units in Alaska in addition to the Trans-Alaska Pipeline, the environmental sensitivity of the state, and the limited resources available for inspection, present a risk which requires a formal and permanent presence in Alaska.

## ALASKA DISTRICT OFFICE

Mr. COLEMAN. What are the projected operating costs associated with establishing an Alaska district office?

[The information follows:]

The projected operating costs associated with establishing an Alaska District office were estimated at about $22,000. Equipment (computers, fax, copier, etc.) at approximately $12,000 and furniture at approximately $10,000.

## TRANS-ALASKA PIPELINE TASK FORCE

Mr. COLEMAN. Have members of the Presidential Task Force to assess the safety of the Trans–Alaska Pipeline been appointed yet? If so, please provide a list of the members, and, if not, what are the reasons for the delay?

[The information follows:]

The Task Force members have not yet been appointed by the President. The Task force nominations have been accorded the same scrutiny as other Presidential nominations. The purpose of the review is to ensure that all Task members are of the highest caliber and will represent the President and their agency to the best of their ability.

Mr. COLEMAN. Congress appropriated $550,000 in fiscal year 1993 to support the work of the Task Force. Has any portion of these funds been obligated?

[The information follows:]

Approximately $3,000 has been obligated to date, primarily to support the collection and dissemination of information associated with start-up costs.

Mr. COLEMAN. Do you have a plan for how these funds would be utilized once the Presidential Task Force is appointed?

[The information follows:]

One of the requirements of the legislation is to retain and independent consulting firm with varied technical expertise to assist the Task Force. We project that the bulk of the available funds would be utilized in support of this contract.

Mr. COLEMAN. The purpose of the Presidential Task Force is to conduct an audit of the Trans-Alaskan pipeline (TAPS). However, since passage of the Oil Pollution Act of 1990 which authorized the Task Force, the Department of Interior's Bureau of Land Management has commissioned an independent audit of the pipeline's operation by Alyeska, including Alyeska's safety management, quality control programs, maintenance and environmental operations.

Is there still a need for the Presidential Task Force or has it been overtaken by other events relative to the Alaskan pipeline?

[The information follows:]

There is still an important role for the Presidential Task Force on TAPS to perform. Although there have been several studies performed by the Congress, Department of Interior, Alyeska and the oil companies who own Alyeska, there are several areas of review still required by the legislation but not addressed by the above studies. These areas must still be addressed. One valuable role the Task Force could fill, for example, would be to examine the findings and recommendations from the several studies, and determine the best options for consideration by the President and the Congress. In addition, there has been much discussion among the agencies responsible for nominating Task Force members concerning a revised structure for oversight of TAPS.

Mr. COLEMAN. Please summarize the findings of the Interior Department audit of TAPS and indicate what follow-up actions RSPA plans to take.

[The information follows:]

The DOI audit of TAPS, known as the QTC report, focuses mainly on recommended improvements to Alyeska's Quality Assurance program and to the company's management philosophy. OPS has carefully reviewed the report and identified all specific issues that we believe fall within our area of safety and environmental concern (e.g., the adequacy of Alyeska's continuing training program and the adequacy of Alyeska's document control system). Six Letters for Specific Information (a first step in our compliance process) have been sent to Alyeska on each of these issues. We expect Alyeska to respond within the 90 day time limit provided in these letters.

Mr. COLEMAN. The Joint Pipeline Office issued a report in November 1992 which concluded that the TAPS cathodic protection monitoring procedures did not meet federal pipeline safety regulations. What steps have been taken to address this problem?

[The information follows:]

The JPO, including OPS, has been meeting periodically with Alyeska in developing an improved cathodic protection monitoring program. A full report is expected in May 1994 detailing Alyeska's planned improvements. Because this plan has been arrived at jointly, OPS anticipated being able to accept the plan and monitor its implementation.

Mr. COLEMAN. Has Alyeska submitted to RSPA its plan for upgrading existing cathodic protection, and to effectively monitor all cathodic protection systems on the TAPS crude oil tanks?

[The information follows:]

Alyeska has submitted a plan acceptable to OPS to inspect tank bottoms and upgrade cathodic protection on their crude oil tanks and is actively implementing this plan.

Mr. COLEMAN. What additional reports did the Joint Pipeline Office issue in 1993 relative to corrosion on TAPS?

[The information follows:]

The JPO did not issue any additional reports relative to corrosion on TAPS in 1993.

### ONE-CALL PROGRAMS

Mr. COLEMAN. Which states do not have "one call" damage prevention programs?

[The information follows:]

Four states do not have one-call damage prevention legislation—Alabama, Hawaii, Texas, and West Virginia.

Mr. COLEMAN. Which states have "one call" programs, but do not have mandatory participation?

[The information follows:]

Twenty-three states have legislation but do not have mandatory participation—Alaska, Colorado, Delaware, Indiana, Kansas, Maine, Mississippi, Missouri, Montana, Nevada, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Oregon, South Carolina, South Dakota, Tennessee, Utah, Wisconsin, and Wyoming. This listing is based on information appearing in the Excavator's Damage Prevention Guide—1993–1994 Directory, compiled by One Call-Systems International, and affiliate of the American Public Works Association.

Mr. COLEMAN. Which states do not provide for assessment of civil penalties for one-call violations?

[The information follows:]

Our records indicate that at least 30 states may not have the statutorily mandated level of civil penalty authority required under the Natural Gas Pipeline Safety Act of 1968. During 1994, the OPS state liaisons will be validating information provided by the states on the status of their adoption of the minimum one-call notification system requirements mandated in the Pipeline Safety Reauthorization Act of 1988 and set forth in 49 CFR § 198.37. After that validation, we will have a more accurate indication of the specific authority each state has for assessing civil penalties.

### PIPELINE SAFETY—UNOBLIGATED BALANCE

Mr. COLEMAN. What is the current unobligated balance in the Pipeline Safety Fund?

[The information follows:]

The unobligated balance at the beginning of fiscal year 1994 was $16,972. The unobligated balance at the end of fiscal year 1994 will be approximately the same, since expenditures from the fund are offset by collections received during the fiscal year.

### PIPELINE GRANTS

Mr. COLEMAN. States participating in the Pipeline Safety Program must annually certify the extent of their compliance with federal regulations in order to qualify for federal funds. Why do states continue to receive grant allocations when many of them are in noncompliance with federal requirements?

[The information follows:]

The grant funds are designed, in large part, to provide an incentive for states to take on pipeline safety jurisdiction that would otherwise fall to RSPA. The critical goal for the RSPA state program each year is to improve state performance, primarily in the following three areas: obtaining full intrastate jurisdiction; adopting all federal safety regulations; and adopting effective one-call legislation. While RSPA does hold back funds from those states with inadequate performances, to deny them a grant would only transfer oversight responsibility to RSPA, which does not have the resources for the additional workload.

### PIPELINE SAFETY PROGRAMS—FEDERAL/STATE COSTS

Mr. COLEMAN. The Natural Gas Pipeline Safety Act and Hazardous Liquid Pipeline Safety Act authorize federal reimbursement for up to 50 percent of the costs of state pipeline safety programs. Does the Administration support 50 percent federal cost sharing?

[The information follows:]

In fiscal year 1991, the Administration supported a gradual increase in the grant appropriation up to an amount that would represent 50 percent reimbursement if the grant payments were based solely on the level of performance achieved by a state. Previously, the amount of a grant that a state would receive was based primarily on the size of the state's program—smaller states with lesser programs typically received 50 percent reimbursement of their limited costs as an incentive to keep them in the program so that their intrastate inspection units would not revert to RSPA should the state withdraw from the program. This "program" based funding recognized the relatively small amount of grant funds available throughout the 1980's and early 1990's. With a strong commitment from RSPA to pursue grant allocation based on performance, funding for the grant program increased by approximately 61 percent between fiscal year 1991 and 1994. In fiscal year 1994 and 1995, we will be allocating the $7.500M and $8.0M, respectively, on the ratio of 80 percent for performance and 20 percent for program size. RSPA will continue to support funding for the grant program up to a level that will assure all states that they will receive 50 percent of their program costs, and will continue to link this funding level with performance.

Mr. COLEMAN. When do you anticipate that this level of cost sharing would be provided to the states?

[The information follows:]

By fiscal year 1996, we expect to have in place a fair and effective set of appropriate performance measures by which the states should be evaluated. Consequently, we believe that in recognition of performance measures being in place, the impending pass-through to the states of a number of new regulations they will be required to adopt and enforce, and the need for the federal pipeline safety program to leverage the state compliance resource to the maximum extent practicable, full 50% funding should be sought in the budget for fiscal year 1996.

Mr. COLEMAN. What proportion of state costs are reimbursed under the 1994 pipeline safety grant program and what proportion would be reimbursed under the 1995 request for the pipeline safety grant program?

[The information follows:]

In 1993, states on average were reimbursed for a total of 34 percent of their natural gas program costs and 30 percent of their hazards liquid program costs. In 1994 and 1995, the percent of costs covered will remain about the same because we will be funding three additional state programs this year and plan additional new programs in 1995.

### GAS PIPELINE SAFETY PROGRAMS

Mr. COLEMAN. Please list the eligible state jurisdictions participating in the federal gas pipeline safety program for fiscal year 1993 and show the amount of state costs, the federal contribution, and the percentage of federal contribution to total costs, similar to the chart shown on page 869 of last year's hearing record.

[The information follows:]

## 1993 NATURAL GAS PIPELINE SAFETY GRANT ALLOCATION

| STATE | REQUEST | ALLOCATION | % OF FUNDING |
|---|---|---|---|
| ALABAMA | 329,591 | 209,570 | 32 |
| ARIZONA | 368,166 | 227,804 | 31 |
| ARKANSAS | 163,865 | 162,504 | 49 |
| CALIFORNIA | 595,714 | 232,989 | 20 |
| COLORADO | 126,465 | 104,411 | 41 |
| CONNECTICUT | 137,500 | 131,791 | 48 |
| * DELAWARE | 16,738 | 15,860 | 47 |
| FLORIDA | 45,000 | 36,406 | 40 |
| GEORGIA | 196,667 | 172,170 | 44 |
| ILLINOIS | 193,905 | 187,464 | 48 |
| INDIANA | 136,658 | 135,523 | 49 |
| IOWA | 123,900 | 116,698 | 47 |
| KANSAS | 327,327 | 199,164 | 30 |
| KENTUCKY | 202,920 | 178,065 | 44 |
| LOUISIANA | 339,150 | 206,180 | 30 |
| * MAINE | 11,625 | 10,402 | 44 |
| MARYLAND | 101,957 | 99,417 | 49 |
| MASSACHUSETTS | 309,020 | 184,366 | 30 |
| MICHIGAN | 192,355 | 181,174 | 47 |
| MINNESOTA | 338,232 | 222,727 | 33 |
| MISSISSIPPI | 111,793 | 103,438 | 46 |
| MISSOURI | 220,650 | 181,072 | 41 |
| MONTANA | 29,398 | 25,492 | 43 |
| * NEBRASKA | 81,659 | 75,042 | 45 |
| * NEVADA | 89,326 | 82,889 | 46 |
| NEW HAMPSHIRE | 51,990 | 47,241 | 45 |
| NEW JERSEY | 264,469 | 171,799 | 32 |
| NEW MEXICO | 155,030 | 134,432 | 43 |
| NEW YORK | 1,018,200 | 314,665 | 15 |
| NORTH CAROLINA | 158,400 | 150,508 | 48 |
| NORTH DAKOTA | 37,305 | 32,659 | 44 |
| OHIO | 310,500 | 202,991 | 33 |
| OKLAHOMA | 172,775 | 156,993 | 45 |
| OREGON | 115,653 | 107,970 | 47 |
| PENNSYLVANIA | 248,937 | 184,199 | 37 |
| PUERTO RICO | 15,000 | 11,014 | 37 |
| RHODE ISLAND | 63,650 | 58,893 | 46 |
| SOUTH CAROLINA | 87,323 | 80,072 | 46 |
| TENNESSEE | 216,029 | 193,651 | 45 |
| TEXAS | 783,276 | 283,173 | 18 |
| UTAH | 96,230 | 93,033 | 48 |
| VERMONT | 49,117 | 48,709 | 49 |
| VIRGINIA | 140,276 | 126,298 | 45 |
| * WASHINGTON DC | 43,698 | 41,892 | 47 |
| WEST VIRGINIA | 136,778 | 116,333 | 43 |
| WISCONSIN | 142,400 | 108,108 | 38 |
| * WYOMING | 97,188 | 89,749 | 46 |
| **TOTAL** | 9,193,805 | 6,237,000 | 34 |

*NOTE: THE 'REQUEST' REPRESENTS 50% OF THE STATE'S ESTIMATED BUDGET. THE '% OF FUND' IS THE PERCENTAGE OF THE BUDGET REPRESENTED BY THE ALLOCATION.*

* STATE TO RECEIVE AT LEAST SAME LEVEL OF FUNDING AS IN 1991 UNDER REVISED ALLOCATION FORMULA, PROVIDED ITS REQUEST IS AT

1991 LEVEL OR HIGHER.

## 1993 HAZARDOUS LIQUID PIPELINE SAFETY GRANT ALLOCATION

| STATE | REQUEST | ALLOCATION | % OF FUNDING |
|---|---|---|---|
| ALABAMA | 19,922 | 18,739 | 47 |
| ARIZONA | 37,300 | 37,300 | 50 |
| CALIFORNIA | 691,282 | 272,599 | 20 |
| LOUISIANA | 53,146 | 49,091 | 46 |
| MINNESOTA | 84,558 | 84,558 | 50 |
| MISSISSIPPI | 3,308 | 2,775 | 42 |
| NEW YORK | 25,650 | 22,389 | 44 |
| * OKLAHOMA | 68,820 | 66,947 | 49 |
| TEXAS | 138,225 | 125,336 | 45 |
| WEST VIRGINIA | 15,198 | 13,266 | 44 |
| **TOTAL** | 1,137,409 | 693,000 | 30 |

*NOTE: THE 'REQUEST' REPRESENTS 50% OF THE STATE'S ESTIMATED BUDGET. THE '% OF FUND' IS THE PERCENTAGE OF THE BUDGET REPRESENTED BY THE ALLOCATION.*

* STATE TO RECEIVE AT LEAST SAME LEVEL OF FUNDING AS IN 1991 UNDER REVISED ALLOCATION FORMULA, PROVIDED ITS REQUEST IS AT 1991 LEVEL OR HIGHER.

## INTRASTATE PIPELINES—STATE JURISDICTION

Mr. COLEMAN. Which states have authority over intrastate pipelines and which states are having difficulty obtaining state jurisdiction over intrastate pipelines?

[The information follows:]

A listing follows of states participating in the natural gas and hazardous liquid pipeline safety programs. Alaska, Hawaii, and Idaho are the only states not participating in the gas program. Maine recently gave notice that it intends to withdraw from the gas program, but we are still working with the state.

States having difficulty obtaining safety jurisdiction over municipal systems include Pennsylvania, California, and Virginia. Additionally, a number of states do not have jurisdiction over small gas operators of master meter and liquefied petroleum gas systems.

## 1994
## STATES PARTICIPATING IN THE FEDERAL/STATE COOPERATIVE GAS AND HAZARDOUS LIQUID PIPELINE SAFETY PROGRAMS

### NATURAL GAS PROGRAM

### State Agencies Under 5(a) Certification (49)

Alabama
Arizona
Arkansas
California
Colorado
Connecticut
District of Columbia
Florida PSC
Florida (LP Gas Div.- Dept. of Agriculture)
Georgia
Illinois
Indiana
Iowa
Kansas
Kentucky
Louisiana
Maine*
Maryland
Massachusetts
Michigan
Minnesota
Mississippi
Missouri
Montana
Nebraska
Nevada
New Hampshire
New Jersey
New Mexico
New York
North Carolina
North Dakota
Ohio
Oklahoma
Oregon
Pennsylvania
Puerto Rico
Rhode Island
South Carolina
South Dakota
Tennessee
Texas
Utah
Vermont
Virginia
Washington
West Virginia
Wisconsin
Wyoming

*Intending to withdraw from program

### State Agencies Under 5(b) Agreement (2)

Delaware

Wyoming
(Intrastate Transmission and
Gathering Lines)

### State Agencies Acting as Interstate Agents (12)

Arizona
Connecticut
Iowa
Michigan
Minnesota
Nevada
New York
Ohio
Rhode Island
Utah
West Virginia
Wyoming

## HAZARDOUS LIQUID PROGRAM

### State Agencies Under 205(a) Certification (10)

Alabama
Arizona
California
(Fire Marshal)
Louisiana
Minnesota
Mississippi
New York
Oklahoma
Texas
West Virginia

### State Agency Under 205(b) Agreement (1)

New Mexico

### State Agencies Acting as Interstate Agents (4)

Arizona
California (Fire Marshal)
Minnesota
New York

## STATES MEETING FEDERAL REQUIREMENTS

Mr. COLEMAN. What additional federal requirements are states having difficulty meeting?

[The information follows:]

A number of states are having difficulty in meeting federal requirements for the adoption of damage prevention/one-call notification systems and civil penalties consistent with the federal level. Additionally, a number of state agencies are facing obstacles in attaining safety jurisdiction over all intrastate pipeline facilities in the state (e.g., municipal, master meter, and liquefied petroleum gas systems).

## PIPELINE OPERATOR TESTING

Mr. COLEMAN. What is the incidence of alcohol, and drug abuse in the pipeline industry, and will pipeline operators be subject to the Department's new regulations mandating alcohol and drug testing in the transportation industry?

[The information follows:]

The research and Special Programs Administration (RSPA) has no factual data to support or refute what level of substance abuse involves pipeline employees who perform covered functions subject to RSPA regulations. Informal information obtained from over 200 drug inspections and two surveys conducted by the American Gas Association in 1990 and 1991 indicate that the pipeline drug positive rate is somewhere between 0.05 to 1.5 percent of all reported test results.

RSPA recently published a final rule requiring pipeline operators to begin submitting an annual report on the results of their drug testing programs. The first report is due in RSPA on March 15, 1995, and will reflect data collected for Calendar Year 1994, The submission of this data will enable RSPA to determine the overall positive drug testing rate for the pipeline industry.

Pipeline operators have been subject to drug testing regulations since their implementation in April 1990. RSPA recently issued a final rule requiring pipeline operators to implement a limited alcohol misuse testing program beginning on January 1, 1995, for large pipeline operators, and January 1, 1996, for small operators. The new regulations require a limited testing program of post-accident, reasonable suspicion and return-to-duty, but do not mandate pre-employment or random alcohol testing. The testing procedures and equipment are provided for in the 49 CFR Part 40 regulations and is consistent with the other operating administration requirements.

## TRAINING STATE PIPELINE INSPECTORS

Mr. COLEMAN. The fiscal year 1995 request includes a reduction of $54,000 for state and industry safety training at the Transportation Safety Institute. Given that RSPA is encouraging states to assume greater responsibilities for pipeline inspections, what is the rationale for reducing funding for training state inspectors and industry personnel?

[The information follows:]

An additional $54,000 provided by Congress in fiscal year 1994 for training beyond the Department request. OPS, through the Transportation Safety Institute, provided two additional hazardous liquid seminars and one additional hazardous liquid class with the additional $54,000. As the Department's fiscal year 1995 budget was prepared prior to the Congressional increase, the additional funding was not requested. As a result, in fiscal year 1995, we will be providing one less class.

## OPA—OIL SPILL RESPONSE PLANS

Mr. COLEMAN. Please give the subcommittee an update on RSPA's program review of oil spill response plans submitted by pipeline operators under the Oil Pollution Act. How many oil spill response plans have been submitted, reviewed, and approved?

[The information follows:]

Approximately 1200 plans have been submitted and all have been reviewed to determine degree of completeness. The review is proceeding on schedule. RSPA has confirmed that all operators submitting plans have acceptable certification of adequate spill response resources. Operators responded to deficiencies noted during the completeness check.

We are now performing the more substantive compliance review to determine if a plan indicates an adequate level of spill preparedness. To be approved, a plan must meet regulation-based review protocols developed by RSPA in cooperation with other Federal and state agencies having plan review authority.

RSPA is on schedule to transmit the results of the compliance review by the end of fiscal year 1994, thereby leaving several months for operators to correct any planning deficiencies by the February 18, 1995, statutory deadline. As reviews are completed, the results will be provided to operators so that they can respond to any planning deficiencies.

Mr. COLEMAN. What are your projections for fiscal year 1995 for plan reviews and approvals?

[The information follows:]

We expect that during the first half of the fiscal year we will be working with operators to address planning deficiencies identified in FY 1994 that must be addressed prior to our issuing a "plan approval." About half of the 1200 plans need substantial improvements to meet the minimum requirements. Later in the year, we will be working with the operators to address planning improvements which go beyond the minimal requirement, but which we believe would substantially enhance the operators capability to respond to an oil spill.

### PIPELINE SAFETY—ENVIRONMENTAL FACTORS

Mr. COLEMAN. Please elaborate on RSPA's progress in identifying environmentally sensitive locations and developing a methodology to rank these sites on a risk priority basis.

[The information follows:]

RSPA has created a computerized data base on each plan. The file includes data on response zone location, including county and state, anticipated worst case discharge volume, commodity, area plan involved, and incomplete data on proximity to environmentally sensitive areas and water, particularly public drinking water intakes.

We update the data base as we complete each profile, containing the above attributes, with information we gather during the more substantive review process. Data comes from a number of sources. We routinely provide this data base to EPA and USCG regional personnel, who have the lead in the development of area contingency plans.

It is within the area contingency planning process that we expect the risk-ranking to occur. RSPA plays a role in that process through our provision of data on risk and our ability to get operators to participate in a more proactive manner in better defining risk. The prioritization is a very collaborative, multi-year process which ideally involves public participation. We are meeting with state agencies several times a year to refine goals and procedures by which all federal and state agencies and industry can accomplish the risk-ranking of areas of environmental importance.

Mr. COLEMAN. Please characterize the adequacy of the plans reviewed to minimize environmental damage in the event of an oil spill.

[The information follows:]

The plans vary enormously in their quality. All operators, by virtue of their being involved in the national response system planning process, are making important improvements. RSPA believes that about half of the pipeline operator plans we have received need significant improvements.

### OPA—CONTRACTOR SUPPORT

Mr. COLEMAN. Why is an additional $252,000 needed in fiscal year 1995 in contractor support for oil spill plan reviews?

[The information follows:]

There are several functions which support the review of response plans. Among the most important, we believe that it is necessary to test, or "drill," a paper plan to determine the operator's ability to execute the plan. Many of these plans were developed by personnel at centralized locations far removed from sites where plans would actually be implemented. As part of a national effort last summer to develop exercise policy, we participated in framing goals and guidance for operators on exercise program needs. RSPA has agreed with other federal and state agencies that at least two area-wide pipeline exercises, including equipment deployment, should be held each year. Additionally, smaller, table top exercises would focus on the decision-making process during spills. RSPA would have the lead in the planning of these pipeline exercises.

Mr. COLEMAN. Please break down how the $2.520 million in contract support requested for fiscal year 1995 will be used.

[The information follows:]

We will not have a precise breakdown until we are further along in the plan review process because we cannot predict all the contract labor that will be required to get all the plans corrected to the point of approval. About 50 percent-60 percent of funding is needed to get through the reviews for minimal adequacy, 25 percent for review/technical assistance for enhancements to improve planning capability, 15 percent to start the exercise program, and 10 percent for computerized mapping and information exchange.

### OPA STAFF

Mr. COLEMAN. How many staff does RSPA have assigned to this program? Is this number sufficient in light of the number of oil pipeline operators and oil spill plans submitted?

[The information follows:]

RSPA still uses a cross-functional team approach to implementing OPA, so several staff work part time on this program. We have approximately four people assigned full time, and seven others part time. So far, we have managed to stay on schedule with program implementation.

### OPA—DRILLS & TRAINING

Mr. COLEMAN. What portion of the $2.520 million requested for fiscal year 1995 will be devoted to designing and executing training and drill exercises to enhance emergency preparedness for pipeline oil spills?

[The information follows:]

We currently estimate about 15 percent is required for exercises, although this will depend on our ability to complete all aspects of the plan review process within the labor estimates we have to date. Since this is our first experience in this area, we have not had many parameters in place to gauge work requirements.

Mr. COLEMAN. Has RSPA monitored any exercises carried out by the oil pipeline operators to test the plans? What were the results?

[The information follows:]

We have observed several exercises in many parts of the U.S. The scope and degree of difficulty of these exercises varied a great deal, as did the amount of participation by other responding organizations. Based on the feedback following these exercises, and the lessons learned requiring planning improvements, we became convinced of the value of these exercises in improving the capabilities of all parties in the national response system, including federal, state, local and public sector organizations. Of particular importance is stressing the operator's management team in the decision processes used for protecting the environment and particularly water supplies, and integrating with the response resources of other organizations.

### PIPELINE SAFETY—QUANTITATIVE METHODOLOGIES

Mr. COLEMAN. RSPA's budget justifications indicate that the Office of Pipeline Safety will need to develop quantitative methodologies, such as contingent valuation, to develop environmental assessments and environmental impact statements to accompany hazardous liquid safety rulemakings.

However, the methodology concerning contingent valuation is very controversial and not well developed. Please elaborate on your plans "to use more sophisticated natural resource damage assessment methodology," including contingent valuation, and indicate which significant rulemakings might be candidates for its application.

[The information follows:]

In accordance with the Oil Pollution Act of 1990, the National Oceanic and Atmospheric Administration (NOAA) recently published its proposed rules (59 FR 1062; January 7, 1994) on estimating natural resource damages, including methods for using contingent valuation. Contingent valuation involves using surveys to estimate the passive use value of a resource.

RSPA is exploring techniques to use the methodologies developed by NOAA and the Department of the Interior to prospectively estimate the benefits of its rules that prevent, or mitigate the effects of, hazardous liquid spills into the environment. The costs of oil spills include a natural resource damage component that RSPA had previously not quantified. RSPA must evaluate these techniques to ensure that it is accurately assessing the impacts of its rules on the environment. This is crucial if RSPA is to ensure that it is regulating in the most cost-effective and cost-beneficial manner possible.

After RSPA develops these applications for prospective analysis, they can be used for all important rulemakings involving the pipeline transportation of hazardous liquids.

### OPS—BUDGET INCREASE

Mr. COLEMAN. The Office of Pipeline Safety is requesting an 87 percent increase in funds to support information systems development in fiscal year 1995. Why is such a large increase justified?

[The information follows:]

OPS has been severely limited in its ability to analyze the data it collects because of inadequate resources. OPS needs more and better data, such as obtaining supplemental information after initial reports are received. Often complete data is not included in the report. In addition, OPS must conduct better and more complete analysis in order to identify failure trends. OPS hopes to have a better directed program through better information distribution and development of better analytical capabilities both for OPS staff and for state partners.

Mr. COLEMAN. The fiscal year 1995 request includes $100,000 for a new activity to evaluate natural gas and hazardous liquid pipeline design and operating criteria. Why is this activity a high priority for funding in fiscal year 1995?

[The information follows:]

Through close cooperation between OPS and the County of Fairfax that prevailed throughout the investigation of the Colonial Reston accident, consultants to the County suggested that current regulation and industry code criteria should be evaluated because they do not provide for failure by leak before rupture, and because other criteria, such as allowable dent depth, are insufficiently conservative. Corresponding regulatory changes would have the potential to reduce the volume of a spill and the consequence of a hazardous liquid pipeline failure, and therefore would merit high priority. OPS is considering the potential validity of the County's suggestions very seriously. An evaluation would be performed at the National Institute of Standards and Technology to avail OPS of a technically qualified and impartial resource.

## AIRLINE TARIFF FILING

Mr. COLEMAN. How much in airline tariff filing fees was collected in fiscal year 1993, and what are your current estimates of fee revenue for each of fiscal years 1994 and 1995?

[The information follows:]

Fiscal year 1992 $751,956.40 actual
Fiscal year 1993 $645,000.00 actual
Fiscal year 1994 $280,002.00 to date
Fiscal year 1994 $600,000.00
Fiscal year 1995 $700,000.00

Mr. COLEMAN. What planned enhancements in the electronic tariffs filing program will not be accomplished if filing fees in fiscal year 1994 do not reach $1.0 million, as projected?

[The information follows:]

No expert system programming enhancements are likely to be accomplished in fiscal year 1994, due to the shortfall in fee collections. Regardless of the amount of fees collected, RSPA's basic strategy is to minimize paper tariff filings, leading to an essentially "paperless" tariff environment by fiscal year 1996. To that end, RSPA is contemplating exemptions for routine cargo tariff filings, and will undertake a rulemaking to allow all-electronic passenger tariffs. DOT has concluded that custody of tariff files by air carriers is sufficient, and is proposing amendments to Section 1103 of the act to eliminate DOT custody of an official tariff file. A development schedule to implement an electronic tariff Requirements Definition Document (RDD) was completed in August 1993 to advance the development of the electronic tariffs filing program over five years through fiscal year 1996 at a total cost of about $2.5 million. Each process step is identified by function, with the required software and hardware, and each is designed to be accomplished in phases as filing fee funds are collected. Filing fees are being collected at around $45,000 to 70,000 each month, indicating likely collections of $600–$700K annually, and Congress has authorized expenditures of up to $1.0 million each year, limited to the actual collections.

Mr. COLEMAN. What management initiatives will be put into place to permit the elimination of six positions for the airline tariffs program in fiscal year 1995?

[The information follows:]

A number of initiatives are being contemplated by RSPA, and action has already been taken to accommodate a reduction in positions during FY94. They include: (1) Less review of special tariff permissions (STP's), tariff transmittals, and electronic filing advices (EFA's). RSPA now reviews primarily only fares subject to the Standard Foreign Fare Levels (SFFL) or other important classes of fares. (2) Elimination of separate public reference system files maintenance, and redundant DOT copies of electronic tariff filings. We now use the official system as the only data source. (3) Plans to eliminate review of cargo filings (4) Elimination of cancelled tariff page filings, and maintenance of only current tariff files. Where historic tariff matter may be needed, retrieval is from other files, including ATPCO's historical tariff database. (5) Reduction of staff involvement in tariffs receipt controls, funds controls and workload tracking. And finally, (6) RSPA has already eliminated review of highly market sensitive fares, such as Group fares and Inclusive Tour fares that do not require intensive routine regulatory scrutiny by DOT.

Mr. COLEMAN. What are the practical implications of the deregulation of airline cargo tariff filing, and what are the associated annual budget savings?

[The information follows:]

The practical implications of eliminating routine filing of cargo tariffs will be minimal, reducing staff workload by one-half (½) an FTE. Less than 10,000 pages of cargo tariffs are filed each year, while passenger tariffs are over 100,000 pages. Further most cargo tariff filings have been essentially deregulated for years. Filings of the regulated General Commodity Rate tariffs are few and are rarely needed by DOT for significant regulatory actions. By exempting routine filing of separate cargo rate tariffs, RSPA expects little impact. DOT staff have used cargo rate filed only rarely in several years, and RSPA is able to eliminate requirements for specialized knowledge of cargo operations. Further, no significant changes within the airline industry are anticipated, although the industry is expected to avoid cargo tariff filing costs associated with preparing and transmitting the cargo tariffs to DOT, estimated at several hundred thousand dollars. Eliminating routine cargo tariff filing promotes efficient operations of the air carriers and RSPA, but budget impact is not large, and the estimated net annual budget savings are about $32,000. This results from a reduction of PC&B costs by $42,000 to $52,000 and a decrease of related cargo tariff filing fees of approximately $10,000 to $20,000 from RSPA's receipt of 7 to 10K of cargo tariff page filings each year, with a filing fee of $2 for each page, plus several hundred STP filings at $12 each.

Mr. COLEMAN. What is the projected impact on annual tariff fee filing revenue?

[The information follows:]

We estimate the impact on filing fee income from the elimination of cargo rate information to be a reduction in filing fees of approximately $10,000 to $20,000 per year, the amount currently received each year from 7 to 10K pages of cargo tariffs at $2 a page, plus several hundred STP filings at $12 each.

Mr. COLEMAN. Why do you project that tariff filing fees in fiscal year 1995 will remain at the $1.0 million level, when requirements for cargo tariff filing have been eliminated?

[The information follows:]

Cargo tariff filing has not yet been eliminated; however, the impact of elimination is anticipated to be minimal. Tariff filing fees have been projected in FY95 to possibly reach the $1.0 million level, although the current collection rate of about $45,000 to 70,000 each month indicates a likely collection level of $600,000 to $700,000. Because the advancement of the electronic tariff system is being tailored to the funds available, the actual amount in any one year is not critical. The projected reduction of fees resulting from elimination of cargo tariff filing is estimated to be only $10,000 to $20,000 per year. For instance, passenger tariff filings represent several hundred thousand "pages" of filings annually, as compared with less than 10,000 annual pages of cargo tariff filings. Other fluctuations, such as industry price wars in passenger tariffs, or fuel price fluctuations that may generate extensive revisions of passenger tariff filings, would have a much more significant impact on RSPA tariff filing fee collections than the loss of the relatively minor number of cargo tariff filings.

Mr. COLEMAN. What has been the reaction of the airline industry to the deregulation of cargo tariff filing requirements?

[The information follows:]

Cargo tariffs have essentially been deregulated for years, and the elimination of cargo filings is not expected to generate much industry comment. Since the elimination of cargo tariff filings in a rulemaking currently included in the regulatory agenda is to be accomplished in FY94, DOT has not received any industry comments at this time. RSPA has proposed the rulemaking in the Regulatory Agenda as an item to be accomplished by DOT. No significant objections are anticipated, since a filing requirement burden is being eliminated, and no alternate burden is being proposed.

## INETS DEVELOPMENT

Mr. COLEMAN. What is the Interim Electronic Tariff System (INETS) and why did RSPA decide to cancel its further development?

[The information follows:]

INETS was never intended by DOT as a permanent system. It was designed as an electronic interim storage system to maintain a daily tariff transaction filing archive, and it was never intended as a user-friendly, accessible database that allowed fares to be researched and retrieved by market city-pair, or carrier, or fare type. It was merely a record of all fare changes proposed by Airline Tariff Publishing Co. (ATPCO) on behalf of its client air carriers, and the corresponding action taken by DOT. At the time of adoption (1/19/89) of Subpart W of 14 C.F.R. Part 241 (which initiated electronic tariff filings) there was substantial concern that the Government must separately maintain its own tariff record system. INETS was DOT's own "official" copy of the filed electronic tariff. INETS was intended to provide that separate record system until DOT obtained experience working with the electronic tariffs.

At the time of institution of the INETS system, some members of the public were constantly investigating tariff questions, and two (2) data firms had full-time staff members personally on duty in the DOT tariff offices. Review of the above information and experience showed that INETS was : (1) Difficult to use; (2) Not necessary to satisfy DOT record requirements; (3) Not needed as of FY93 by the primary DOT data user (OST); (4) Not used by the RSPA tariff staff; (5) Less flexible, useful or searchable than the paper-based system it replaced; (6) Cost more than $250,000 a year to operate. Public interest and demand for fares on file with DOT has fallen to less than one request per month. Experience showed that INETS was not user-friendly. At the time of discontinuation of INETS in July 1993, more than $750,000 had been spent on developmental work, with no major improvements in useability to enable market, carrier, or fare-specific searches by users. Therefore, in FY93 INETS was judged by DOT's primary user, the Office of International Aviation, to be redundant to the air carrier tariff files at ATPCO, and thus unnecessary. No difficulties have been noted by any DOT users, nor is RSPA aware of any problems of other tariff users, since RSPA discontinued INETS more than 9 months ago.

## AIRLINE TARIFF COSTS

Mr. COLEMAN. What are the fiscal year 1995 and fiscal year 1996 information technology costs of achieving full automation of the passenger tariff system by the end of fiscal year 1996?

[The information follows:]

RSPA may determine that a better alternative in view of our downsizing government initiatives would be an interface to the various existing or potential air carrier tariff automation systems, in lieu of complete RSPA automation on an accelerated basis by the end of FY96. However, assuming RSPA determines that full automation is appropriate, a total cost of $2.5 million has been estimated. If $2.5 million were invested through FY96 (slightly more than $1M a year) in addition to the operating and developmental costs of about $200K to $500K that have been expended annually since 1990, RSPA would complete the electronic tariff system. While some operational costs could be saved by completing the development within two years (by the end of FY96), those would not likely be major savings, and RSPA plans to carefully coordinate and integrate the RSPA electronic tariff developments with the industry's pace of electronic tariff filing development by ATPCO and others, so that a fully functional system is developed in sync with industry designs.

Mr. COLEMAN. What are the total (personnel and operational) costs of operating the airline tariffs filing system, and what are its projected annual operating costs once the system is completely automated?

[The information follows:]

The current funded costs fo operating the airline tariff filing system in fiscal year 1994 was projected to be slightly more than $700K of PC&B and administrative costs per year. With the reduction of staff by nearly one-half, the cost level should be approximately $400,000 by the end of the FY. This does not include any expenditures for DOT tariff computer system operations or any further development of programming or hardware plans by the Volpe National Transportation Systems Center for INETS electronic tariff archives, discontinued starting in July 1993.

The projected cost breakdown for future periods depends on the extent of electronic filing of tariffs determined by RSPA, and the electronic tariff data users, to best meet the needs of DOT. According to the Implementation Plan proposed by RSPA in November 1993, developmental costs could be $1.2 million in FY95, $1.1 million in FY96, and $15,000 in FY97, while PC&B could be as low as $100K each year for an Electronic Tariff System FTE. No estimate of annual operating costs has been prepared pending determination of the amount of electronic reviews and controls necessary, although RSPA's view is that operating costs of INETS, which was only an electronic tariff daily transaction archive system, consumed about $250K to $300K a year prior to its discontinuance. Similar or slightly large computer system operations costs may be expected for a fully automated passenger fare filing system, thereby indicating a total annual cost of $450,000 or more.

## AIRLINE STATISTICS PROGRAM

Mr. COLEMAN. Since the FAA and OST are the primary users of the airline statistics, should the airline statistics program be transferred to the Bureau of Transportation Statistics?

[The information follows:]

The Bureau of Transportation Statistics (BTS) has no vested interest in the performance of the airline statistics program.

The BTS mission is "to compile, * * * and make accessible information on the Nation's transportation systems; to collect information on intermodal transportation and other areas as needed." There are specific differences between the data collection and data compiling functions as well differences between the individual transportation modes and intermodal transportation system. The BTS does not centralize or replace data collection programs of other administrations. BTS is primarily an analytical organization, assembling and interpreting information on the extent, use, condition, performance and consequences of the Nation's intermodal transportation system.

Mr. COLEMAN. What are the Department's Bureau of Transportation Statistics responsibilities with regard to aviation statistics? How does the Office of Aviation Information Management interface with the Bureau of Transportation Statistics?

[The information follows:]

The Bureau of Transportation Statistics (BTS) is responsible for the compiling, analysis and accessibility of information pertaining to intermodal transportation. The BTS has provided as "Directory of Transportation Data Sources," December 1993, which identifies various sources for transportation data which includes the aviation related data (financial, traffic, international markets and segments) collected by the RSPA's Office of Airline Statistics (name changed from Office of Aviation Information Management). Domestic and foreign air carriers data are made available to the BTS at their request. Additionally, the BTS interfaces with the RSPA's Volpe National Transportation Systems Center for DOT intermodal transportation system data.

Mr. COLEMAN. Please detail the total budget and sources of funding used to support the airline statistics program in fiscal year 1994 and planned in fiscal year 1995.

[The information follows:]

TOTAL BUDGET

| | Fiscal year— | |
|---|---|---|
| | Enacted 1994 | Request 1995 |
| Personnel compensation and benefits (23 FTE) | $1,526,000 | $1,526,000 |
| Administrative costs: | | |
| Travel | 8,000 | 8,000 |
| Training | 5,000 | 5,000 |
| Supplies/materials | 11,000 | 11,000 |
| Equipment | 14,000 | 14,000 |
| Printing | 15,000 | 15,000 |
| Communications & utilities | 29,000 | 32,000 |
| Total admin cost | 82,000 | 85,000 |
| Operations program: | | |
| Information management | 289,000 | 289,000 |
| Total appropriated funds | 1,897,000 | 1,900,000 |
| User Reimbursement (FAA) | 500,000 | 500,000 |
| Total OAS program | 2,397,000 | 2,400,000 |

Mr. COLEMAN. Will all existing airline statistics data bases be maintained in fiscal year 1994 and in fiscal year 1995 under your budget request?

[The information follows:]

Through continuous monitoring and modification of the ADP resources required to support the airline statistics program, it is anticipated there will be no adverse effects to the maintenance of aviation databases due to budget constraints for FY 1994. All of the airline statistics data bases will be maintained in FY 1994 to support anticipated user's data needs.

However, in FY 1995, because the INS I–92 data processing costs were not included in the RSPA's OMB budget submission, a short fall of approximately $150,000 will occur. Priorities will be established with the OST and FAA users to identify which data systems and associated data products will be maintained. Clearly, data system products will not be at the some level for each of the seven data systems. The COT's need for the I–92 data will be reviewed to determine specific actions to take to resolve the anticipated $150,000 short fall in FY 1995. We are currently reviewing with United States Travel and Tourism Administration (USTTA) and other federal agencies, who are major users of the I–92 data, ways to increase funds to support this data base. Raising the subscription price for the data is a source currently being considered.

Additionally, the data bases and data services may not be as timely and accurate until a full assessment is made of the RSPA's volunteer retirement separation buyouts. Between April 1994 (first buy out window) and October 1994 (second proposed window), the Office of Airline Statistics will probably lose seven senior staff, a reduction of over 30 percent. The OAS is currently looking at ways to overcome a loss of this magnitude and knowledge.

Mr. COLEMAN. What refinements and enhancements have been made in the past year to the various aviation statistics data bases maintained by RSPA?

[The information follows:]

The following refinements and enhancements have been made:

1. In March 1993, the Office of Airline Statistics (OAS) announced that it would accept submission of financial Form 41 Schedules B–1, B–1.1, P–1.2, P–5.1, P–5.2, P–6 and P–7 on automated media, either diskette or magnetic tape/cartridge, in lieu of hard-copy report submissions. Also, carriers are allowed to use their own software for automated reporting. OAS provided air carriers' at no cost, a software package (floppy diskette and an instruction manual) for automated financial reporting. The software has an edit routine which has improved the quality of carriers' submissions. The automation of the reporting process has improved the quality and timeliness of financial data for staff use.

Form 41 financial data are now available to OST analysts 30 to 40 days earlier than it was previously because carriers input has been automated. The accuracy and consistency of the data have been improved through inter-as well as intra-schedule time series crosschecks. The data is now accessible to OST analysts in an online relational database that contains the corresponding traffic data.

2. In August 1993, OAS assigned to the Alaskan Field Office (AFO) the primary responsibility of editing Form 298–C submissions from Alaska air carriers. The AFO is fully aware of the services offered by the Alaskan air carriers and is able to detect omissions in carrier reports which improve the quality of the Form 298–C data base.

3. In July 1993, OAS issued an accounting and reporting directive to clarify the boundary on the Asian continent for dividing operations between the Atlantic and Pacific reporting entities for Form 41 reporting purposes. This clarification improves the uniformity and quality of data used for rate making purposes.

4. In May 1993, OAS began compiling tables from the T–100 Reporting System for the department's *U.S. International Air Passenger and Freight Statistics* quarterly publication. This publication shows the month and year-to-date summary of passengers and freight tons flowing between the United States and foreign countries, the percentage carried by flag carriers of the home country, the top 50 countries for passengers, and the top 25 countries for freight. This publication has been well received with approximately 700 names are on the mailing list.

## AIM—DATA COLLECTION

Mr. COLEMAN. What is the current status of RSPA's rulemaking to collect additional data (e.g., wheels up and wheels down time) in the on-time performance reporting system? When do you expect to issue a final rule?

[The information follows:]

The final rule should be issued before the end of September 1994.

Mr. COLEMAN. How will the additional data to be collected be used?

[The information follows:]

The addition of wheels-off and wheels-on times, and the identification of aircraft by tail number, will enable the Federal Aviation Administration (FAA) to use the on-time flight performance data base to track flight delays. The FAA will analyze air traffic operations and create system models for use in reducing en-route and ramp delays. The wheels-off and wheels-on times along with gate arrival and departure times, will allow the FAA to compute delays for taxi-out, airborne, and taxi-in phases of a flight. The tail number will provide the capability to analyze aircraft itineraries which are a major component of the AIRNET model. This model allows FAA to analyze system-wide impacts of capacity constraints or enhancements that may be imposed at one or more airports.

## PASSENGER ORIGIN-DESTINATION SURVEY

Mr. COLEMAN. Please elaborate on your plans to modernize the passenger origin destination survey. What is your overall modernization plan, what are its major milestones, and what are its costs?

[The information follows:]

Modernization of the Passenger Origin-Destination (O&D) Survey will have to address two distinct areas: 1) the source and scope of the data to be collected, which includes impact of changing carrier operating practices such as ticketing, scheduling and inter-carrier agreements (both domestic and international); and 2) the ADP requirements to underpin the processing of this newly designed system. Addressing the development of the first aspect will involve a rulemaking, before investment of resources in the second aspect. A rule making can take 18–24 months to complete. Budgeting for upgrading the O&D Data System at the earliest is FY 1996 with the associated estimated costs of $500,000 to $1,500,000.

The rulemaking will focus on areas: 1) the necessity of current content such as fare-basis code, 2) the addition of data items such as the selling carrier as well as the transporting carrier for code-sharing operations, 3) recognition that survey data is now being generated from both lift and sales records and the pros and cons of a switch to a sales basis (use CRS system for data source), and 4) automated edit requirements performed by the carriers before submitting the data. The data base and tables will be reviewed to ascertain if the data can be presented in a more meaningful display for the user. The Office of Airline Statistics is presently working with the user community (Office of the Secretary and FAA) in these areas to surface the user requirements. (See Question on code-sharing). It is planned to have the user requirements study completed by September 1994. A notice of proposed rulemaking or advance notice of proposed rulemaking is expected to be published by January 1995.

## AVIATION DATA DEFICIENCIES

Mr. COLEMAN. What additional deficiencies in aviation data needs have been identified by the FAA, OST or RSPA, and what are RSPA's plans for addressing these needs?

[The information follows:]

Deficiencies already identified by the OST and FAA are: 1. FAA has requested additional data be included in one of their primary publications (Airport Activity Statistics). This additional data will reflect nonscheduled (pure charter) activity and activity at points not receiving scheduled service. These enhancements to the publication should be reflected in the December 1993 edition, which is due out at the middle to end of May 1994.

2. The T–100 Traffic and the Passenger Origin-Destination (O&D) have been identified as candidates for enhancement. OST has indicated the inclusion of such items as the citizenship of passengers, aircraft capacities (both passenger and cargo) for foreign air carriers and data on foreign air carriers' small aircraft operations would greatly increase the O&D and T–100 traffic data's usefulness. However, any changes suggested would require formal rulemakings.

3. The OST is currently in the process of reviewing the impact of *international code-sharing agreements,* such as the agreements in effect for USAir/British Airways and Northwest/KLM Royal Dutch Airlines. These agreements enable the air carrier partners to list a single air carrier code in the airline computer reservation systems and promote an image of providing seamless transportation. A problem arises, however, because under a code-sharing arrangement the airline that sells the ticket puts either its air carrier code or the code of its code-share partner on the ticket. Thus, the carrier code listed on the ticket may or may not represent the air carrier that actually provides the transportation. The problem is magnified for travel agency sales because it is not uniform as to which air carrier code, the selling carrier or the transporting carrier, is placed on the ticket. This situation makes it very difficult to analyze, for each affected air carrier, the airline passenger traffic flows that result from a code-share agreement.

4. Several U.S. air carriers have requested confidential treatment for their inventory cost information reported in the Form 41 report. U.S. carriers report the purchase cost of airframes and engines, and sales prices for used aircraft in this report which is public information. The U.S. carriers contend that making this information publicly available places them at cost disadvantage with their foreign competitors who do not make their data available. This area is now currently being reviewed.

5. Service Segment/Schedule T–9 market data were last reported in December 1989 by U.S. air carriers. Because of the competitive disadvantage, international Service Segment/Schedule T–9 data were confidential, since similar data for foreign carriers' were not available. These data are now at least four years old. This area is being reviewed to ascertain if U.S. carriers would be at a disadvantage competitively, if these data were publicly released.

## AIM—FIELD OFFICE FTE

Mr. COLEMAN. How many full-time equivalents are allocated to RSPA's Alaska field office under the Aviation Information Management Program?

[The information follows:]

Two full-time equivalents are assigned to the Alaska Field Office.

## EMERGENCY MANAGEMENT OF NATURAL DISASTERS

Mr. COLEMAN. In the last two years we have had two very serious disasters the Los Angeles earthquake in January 1994, and the Midwest floods in 1993. Please describe the responsibilities and activities of the Office of Emergency Transportation in managing these transportation emergencies.

[The information follows:]

The Office of Emergency Transportation is the Secretary's staff with responsibility for coordinating the emergency preparedness and response efforts of the Department of Transportation to provide transportation support for disaster relief and recovery. This responsibility applies to both headquarters and regions, and with the other Federal agencies, i.e., the Federal Emergency Management Agency (FEMA), the Interstate Commerce Commission, the Department of Defense, General Services Administration, etc.

During the two emergencies the Office of Emergency Transportation immediately activated its disaster response network, which comprises the Headquarters Crisis Management Team and the Regional Emergency Transportation Coordinator's Response Team. These teams, drawn from the Department's Operating Administrations consisting of nearly 100 people, supported the Department of Transportation in meeting its responsibilities under the Federal Response Plan for Emergency Support Function #1 to ensure transportation services meet the needs of the citizens affected by these disasters. Among the specific actions the office undertook were: 1) Preparing the Secretary to "hit the ground" with briefing materials and damage assessment reports. 2) Collecting information from other agencies on the impact of the crisis and their requirements for transportation services. 3) Developing Situation Reports which provided analytical information on the crisis impact on the people and the transportation system, and 4) Disseminating information to the Secretary and senior DOT officials for informed decisionmaking.

In the further discharging of its crisis management responsibilities the Office of Emergency Transportation rapidly collected information about the disasters and the transportation services that had been affected. This information was analyzed and put into Situation Reports to the Secretary and senior policy officials for informed decisionmaking to restore mobility and commerce to the users of the transportation infrastructure.

The Office of Emergency Transportation also uses its out reach network to the community of transportation customers and suppliers to determine issues and resolutions. This is done to prevent negative issues from affecting transportation services and/or disaster victims. For example, the office expended its energies for more than three months managing the crisis activities associated with the Midwest Floods.

## CRISIS CENTER USE

Mr. COLEMAN. As the Secretary's crisis coordinator, RSPA is asking for an increase in funding of $369,000 to upgrade RSPA's crisis management center.

Why do you need these funds if the Coast Guard and the Federal Aviation Administration (FAA) already have communications capabilities for crisis management?

[The information follows:]

The Crisis Management Center (CMC) serves the entire Department, not just RSPA. The Center, located in the DOT Headquarters building, provides a modest operating facility for the Department's Crisis Management Team. Here, a small team of transportation experts from throughout the Department assemble to analyze the impact of the crisis on transportation systems and services, direct the flow of transportation assistance to state and local authorities, and support the Secretary for the duration of the crisis. Communications are only one component of the CMC. The Center will provide computer workstations with automated capabilities for analyzing and displaying disaster effects and enable team members to provide advise to senior decisionmakers. In addition there will be an adequate telephone system to handle the intense stream of information and public inquiries that comes with any major emergency. The communications capabilities of FAA and USCG serve the unique responsibilities of these two agencies during crises. These capabilities will be fully integrated into the DOT Crisis Management operations to the extent of their practicality. This is particularly possible with FAA's transportable satellite systems which provide communications when telephone systems are disrupted. In addition, we will continue to rely upon the 24 hour monitoring capabilities of the FAA and USCG operations centers for initial, rapid notification of unfolding emergencies. However, neither FAA or USCG can provide space, equipment, and administrative support for the Department's team.

Mr. COLEMAN. The Federal Emergency Management Agency (FEMA) also has a responsibility to provide crisis management for the government as a whole. To what extent did RSPA explore using those crisis management capabilities before you decided to enhance your own capabilities?

[The information follows:]

The Federal Emergency Management Agency (FEMA) coordinates the crisis management functions of the entire Federal government. However, DOT has a separate and challenging role in emergency response. Under the Federal Response Plan, FEMA expects DOT to lead the transportation element, managing all aspects of transportation support for disaster relief and recovery. FEMA maintains an operations facility in its Headquarters building for an interagency Emergency Support Team (EST) during emergencies. The EST is a skeletal team of representatives from each of the 27 departments and agencies subscribing to the Federal Response Plan.

DOT has a representative to the EST to coordinate transportation issues with the other Federal agencies located there. This representative is an extension from DOT's Crisis Management Center. FEMA has neither the authority nor the capability to support the internal transportation response team necessary to manage the comprehensive and usually significant transportation response. That responsibility rests solely with DOT. DOT's Crisis Management Center will be fully integrated with FEMA's communications systems. This will allow us to use these systems to expand our own capabilities and, more importantly, to expeditiously provide the information on the transportation network and the flow of relief supplies which FEMA requires for their reports to the President.

Mr. COLEMAN. What impact would occur if RSPA was required to use the existing capabilities of the Coast Guard, FAA, and FEMA as opposed to using your own capability.

[The information follows:]

The capabilities of FAA, the Coast Guard, and FEMA are unique to their operations in crises. The limitations imposed by the unique character of their systems would not serve DOT's requirement for a Crisis Management Center. DOT's crisis management requires a capability to rapidly assess the damage to any segment of the transportation system, rapidly determine the impact on the system and to transportation services and determine alternatives to restore mobility and commerce to the affected area. These singular functions reside in DOT's Crisis Management Center. FAA and USCG can only provide communications support to the Department's Crisis Management Team. The use of this communications capability is planned in the Crisis Management Center's operation as part of the network link for communications. Likewise, FEMA provides capabilities only for an interagency coordinating team, not for individual agency teams. All of these capabilities will be integrated into the Department's Crisis Management Center to the extent they can assist in our mission. Without funding as requested the Department will fail to provide quality response to meet the needs of the public victimized by disasters and future emergency transportation response actions will be severely limited.

Mr. COLEMAN. Please describe specific deficiencies with DOT's crisis management operations that you hope to remedy with the fiscal year 1995 requested funding.

[The information follows:]

RSPA's 1995 budget request is intended to correct several significant deficiencies in DOT's crisis management program. Most critical is the modernization of the DOT Crisis Management Center (CMC) and the related development of an automated, geographic based emergency information system. The existing center in DOT Headquarters has not been upgraded since being installed in the 1960s. As currently configured, the Department lacks any capability for using modern computer technologies to analyze and display the effects of a disaster on the transportation system. A number of geographic information systems exist that would permit our crisis managers to rapidly pinpoint damaged transportation facilities, assess the impacts on the network, identify alternate routes, and track the flow of relief supplies. These systems would then allow DOT to display the analysis in graphic map form for the Secretary and other senior executives to support their decisionmaking on funding relief or emergency mitigation. The same capabilities would be provided to our field response teams which deploy to the disaster site to assist in managing transportation services to the victims.

Beyond the harnessing of new technologies, the 1995 budget request proposes an expanded program of training exercises to ensure that our response teams at Headquarters and in the field are better prepared to assume emergency duties. Because most personnel assigned to these teams do not have regular routine emergency duties, they must be exposed to periodic training as a reminder of the unique functions they would perform in a disaster. In exercises, realistic disaster scenarios are employed to simulate the chaotic and demanding atmosphere in a crisis management center. Participants are given "on the job" training, reflecting the taskings they would receive in disasters. For example, modal administrators and other senior DOT officials indicated participation in exercise RESPONSE 93 did more to prepare them for the Northridge earthquake response than any other recent training experience.

## REGIONAL TRANSPORT COORDINATOR COSTS

Mr. COLEMAN. RSPA's justifications indicate that $55,000 is requested for fiscal year 1995 to pay for the collateral functions assigned to the ten regional emergency transportation coordinators. Why does RSPA believe that it should pay for services previously provided at no cost to the Department?

[The information follows:]

The funding is for departmental emergency preparedness and response mission activities performed by the ten Regional Emergency Transportation Coordinators (RETCO). It is budgeted by RSPA in accordance with the departmental order which establishes the RETCO program. The RETCOs are senior regional officials of the Federal Aviation Administration, U.S. Coast Guard, and the Federal Highway Administration who perform Department-wide crisis management planning and response on behalf of the Secretary and RSPA, as the DOT crisis management element. In past years, RSPA has provided about $35,000 per year, distributed among the RETCOs, to develop and to conduct emergency preparedness and response training directly associated with the Departmental mission. The RETCO's agencies absorbs the balance of the costs to carry out other RETCO functions. Such costs represent 50 to 70 percent of the total RETCO expenditures, depending on the region. In addition, all salary and benefits are funded by the RETCO's agencies. As the budgets of the operating administrations are strained by greater demands and fewer resources, these agencies are less able to absorb the significant costs of the RETCO function. Further, since only three Operating Administrations of DOT are tasked with the RETCO function, those agencies suffer a disproportionate burden. Therefore, to share this burden more equitably, RSPA proposes to expand our support by a modest $20,000 for what is legitimately a Departmental program.

Mr. COLEMAN. Please give some examples of how these funds might be used.

[The information follows:]

RETCO funding, provided by RSPA, is used principally for the following major Departmental emergency preparedness and response functions:

Designing crisis management exercises to be used in association with regional emergency response training.

Developing curriculum for and acquiring tools (software) to support desktop exercises.

Review of State and local response plans and evaluation of field exercises for accidents at more than 50 commercial nuclear power plants in accordance with the Congressionally-mandated programs.

Responding to crises within their respective regions and supporting other regions during disasters.

Maintenance of special communications and ADP equipment used by the Regional Crisis Management teams.

Conducting an outreach program to the customers and suppliers of transportation services in prior planning and during crises to better serve the needs of crisis victims.

## EMERGENCY GEOGRAPHIC INFORMATION SYSTEM

Mr. COLEMAN. What do you plan to achieve with the requested $50,000 for enhancements of the Department's emergency geographic information system?

[The information follows:]

The emergency graphic information system will incorporate textual data that is contained in the transportation emergency information data base into a map display capability to allow rapid, automated visual analysis of the disaster impact on the transportation infrastructure. This capability will allow the Secretary and senior policy officials to make informed decisions to meet the needs of State and local governments to provide services to the citizens who are victims of disasters. Currently the Crisis Management Team must do manual map studies and use unreliable old data to analyze disaster impacts. This leads to decisions based on erroneous assessments. Not only is this an embarrassment to the Federal government, but it could result in a more disastrous affects such as more injuries or deaths to the citizens.

Mr. COLEMAN. Do you have an overall plan for upgrading this system and, if so, what are its major milestones and total cost?

[The information follows:]

The overall plan to upgrade the system includes upgrade of the transportation data base information, acquisition of the graphic information system software and integration of the updated data into the graphic information system. The major milestones would be development costs which includes data update, software acquisition, integration of the updated data and demonstration of the capability. The initial total cost is estimated to be $100,000 over a two-year period. There will be a follow on annual cost of approximately $30,000 thereafter for maintenance which includes data update and integration.

[In thousands of dollars]

| | |
|---|---|
| Development costs: | |
| Year 1 | 50 |
| Year 2 | 50 |
| Maintenance costs: | |
| Year 3 | 30 |
| Year 4 | 30 |
| Year 5 | 30 |

## OET—OVERSEAS TRIPS

Mr. COLEMAN. Please update the data shown on page 882 of last year's hearing record concerning overseas trips taken by OET personnel. Please begin with the date of the last trip covered in last year's hearing record, in order to provide a chronological record.

[The information follows:]

FY-93 overseas trips (10) were:

10/10-17/92 Brussels, Belgium 1 person $2,230

Participate in the NATO Senior Civil Emergency Planning Committee's Plenary meeting as Chairman-elect representing the interests of the U.S. and the Civil Aviation Planning Committee and to develop guidance and direction for civil aviation programs.

11/7-14/92 Brussels, Belgium 3 people $2,774

Represent the U.S. interests at the Fall Plenary meeting of the NATO Civil Aviation Planning Committee to develop procedures for civil aviation support of the North Atlantic Alliance in NATO's new strategic concept. (Note: The Department of State paid a portion of the travel costs.)

1/10-17/93 Brussels, Belgium 1 person $1,541

Represent the U.S. interests at a meeting of the Civil Aviation Planning Committee Training and Exercise Planning Team engaged in developing realistic crisis exercises for civil aviation in support of NATO. (Note: Traveller lives in France.)

2/24-3/5/93 Brussels, Belgium 2 people $1,701

Participate in the NATO Crisis Management Exercise, CMX-93 to test and evaluate the procedures for civil aviation to support NATO in a crisis. (Note: NATO paid a portion of the travel costs.)

3/14-18/93 Brussels, Belgium 1 person $1,763

Represent the U.S. interests at a meeting of the NATO Civil Aviation Working Group in developing technical procedures for civil aviation application in support to NATO during crises. (Note: Traveller lives in France.)

4/14-16/93 Ottawa, Ontario 1 person $849

Participate in the 1993 U.S./Canada Consultative Group Meeting on Cooperation in Comprehensive Civil Emergency Planning and Management representing the Secretary of Transportation's interest in this fora for mutual support in crises.

4/24-5/1/93 Oslo, Norway 1 person $2,465

Participate in the NATO 1993 Civil Emergency Preparedness Symposium and the Senior Civil Emergency Planning Committee Plenary representing the interest of the U.S. and NATO civil aviation planning and to develop guidance and director for aviation programs to support NATO in crises.

6/10-19/93 Brussels, Belgium & Luxembourg City, Luxembourg 4 people $3,728

Represent the U.S. interest at the Spring Plenary meeting of the NATO Civil Aviation Planning Committee and participate in the Civil Aviation Training Seminar to test and evaluate the procedures for civil aviation in a crisis. (Note: Both the Department of State and NATO paid a portion of the travel expenses.)

6/28-30/93 Brussels, Belgium 1 person $828

Represent the U.S. interests at a meeting of the Civil Aviation Planning Committee Training and Exercise Planning Team engaged in the development of a realistic crisis exercise for civil aviation in support of NATO. (Note: Traveller lives in France.)

8/31-9/9/93 Brussels, Belgium 1 person $2,316

Participate in the Civil Emergency Preparedness Planning meeting and the Civil Aviation Working Group meeting to develop technical procedures for application in the acquisition and provisions of civil aviation resources to support NATO during crises. (Note: Traveller lives in France.)

## PC&B ESTIMATES

Mr. COLEMAN. Please explain how you arrived at your fiscal year 1995 budget request for personnel compensation and benefits, including the criteria, assumptions and formulas making that estimate, similar to the data provided on pages 894–895 of last year's hearing record.

[The information follows:]

The FY 1995 Personnel Compensation and Benefits (PC&B) request was derived through the use of a modified payroll model. This model incorporated individual payroll data for each RSPA employee on-board for the pay period ending November 27, 1993. This payroll data included actual personnel benefits such as standard FERS and CSRS retirement, health insurance, life insurance, FICA, Medicare, TSP contributions, Transit Fare Subsidy, and locality pay adjustments for each employee. The model calculated an estimate based on the number of paid days in FY 1995. Adjustments were made to reflect cost increases and decreases for authorized vacancies and FTE reductions, respectively.

Additional detail concerning assumptions and criteria used to calculate the FY 1995 PC&B estimates are listed below:

Vacancies—Specific estimates were added for each vacancy, ranging from GS–7 to GM–13.

FTE reductions—Average costs per FTE were subtracted from the base and some offsetting reduction/buy-out costs were added to the base.

Within grades increases and career ladder promotions—Specific estimates were calculated for each eligible employee.

Awards and overtime—Estimated for each office based on empirical data.

## OFFICE COSTS

Mr. COLEMAN. Please also provide a breakdown of office costs for each RSPA office and organizational unit, updating the charts on pages 896–897 of last year's hearing record.

[The information follows:]

## Program Support Administrative Costs
(dollars in thousands)

| ***Office of the Administrator*** | FY 1994 Estimate | FY 1995 Request |
|---|---|---|
| Personnel Compensation & Benefits | 538 | 557 |
| Administrative | 21 | 26 |
| Travel | 7 | 7 |
| Printing and reproduction | 3 | 3 |
| Training | 3 | 3 |
| Supplies and materials | 4 | 4 |
| Equipment and furniture | 4 | 9 |
| Total | 559 | 583 |

| ***Office of Civil Rights*** | FY 1994 Estimate | FY 1995 Request |
|---|---|---|
| Personnel Compensation & Benefits | 122 | 143 |
| Administrative | 24 | 24 |
| Travel | 6 | 6 |
| Printing and reproduction | 2 | 2 |
| Training | 3 | 3 |
| Supplies and materials | 5 | 5 |
| Equipment and furniture | 8 | 8 |
| Programs | 9 | 74 |
| Total | 155 | 241 |

| ***Office of Chief Counsel*** | FY 1994 Estimate | FY 1995 Request |
|---|---|---|
| Personnel Compensation & Benefits | 1,057 | 1,155 |
| Administrative | 25 | 25 |
| Travel | 8 | 6 |
| Printing and reproduction | 3 | 6 |
| Training | 6 | 4 |
| Supplies and materials | 0 | 3 |
| Equipment and furniture | 8 | 6 |
| Total | 1,082 | 1,180 |

| *Office of Policy and Programs* | FY 1994 Estimate | FY 1995 Request |
|---|---|---|
| Personnel Compensation & Benefits | 366 | 404 |
| Administrative | 26 | 28 |
| Travel | 7 | 7 |
| Printing and reproduction | 5 | 5 |
| Training | 3 | 3 |
| Supplies and materials | 5 | 5 |
| Equipment and furniture | 6 | 8 |
| Programs | 0 | 50 |
| Total | 392 | 482 |

| *Office of Management and Administration* | FY 1994 Estimate | FY 1995 Request |
|---|---|---|
| Personnel Compensation & Benefits | 1,615 | 1,679 |
| Administrative | 46 | 48 |
| Travel | 10 | 10 |
| Printing and reproduction | 6 | 6 |
| Training | 6 | 6 |
| Supplies and materials | 10 | 9 |
| Equipment and furniture | 14 | 17 |
| Programs | 470 | 623 |
| Total | 2,131 | 2,350 |

| *RSPA-wide accounts* | FY 1994 Estimate | FY 1995 Request |
|---|---|---|
| Communications, Utilities, Misc. Charges, WCF & Accounting | 2,036 | 2,565 |

## TRAVEL PER FTE

Mr. COLEMAN. Please provide a chart showing the fiscal year 1995 budgeted amounts for travel per FTE staff year, by RSPA office or organizational unit, similar to the data on page 898 of last year's hearing record.

[The information follows:]

**Fiscal Year 1995 Request For Travel Per FTE Staff Year**
(dollars in thousands)

| | *Amount* |
|---|---|
| Hazardous Materials Safety | $3.215 |
| Aviation Information Management | 0.481 |
| Emergency Transportation * | 10.000 |
| Research and Technology | 1.462 |
| Program and Administrative Support | 0.837 |
| Pipeline Safety | 8.053 |

* Includes travel for annual training programs in each of the ten regions, transportation to Washington D.C. for 2-3 regional representatives to attend the annual Emergency Preparedness Conference, and for overseas travel related to NATO activities.

## RSPA POLITICAL APPOINTEES

Mr. Coleman. Also update the listing of RSPA political appointees and salaries as shown on page 898 of last year's hearing record.

[The information follows:]

| Position title | Type Appointment | Salary |
|---|---|---|
| **Fiscal Year 1994 (planned):** | | |
| Administrator | EX III | $123,100 |
| Deputy Administrator | NONCAREER SES | $107,300 |
| Associate Administrator for Research, Tech & Analysis | NONCAREER SES | $101,800 |
| Director of Program & Policy Support | NONCAREER SES | $ 92,900 |
| Special Assistant | SCHEDULE C | $ 66,609 |
| **FISCAL YEAR 1993:** | | |
| Administrator | EX III | $123,100 |
| Deputy Administrator | NONCAREER SES | $107,300 |
| Associate Administrator for Research, Tech & Analysis | NONCAREER SES | $101,800 |
| Director of Program & Policy Support | SCHEDULE C | $ 66,609 |
| Special Assistant | SCHEDULE C | $ 56,627 |
| **Fiscal Year 1992:** | | |
| Administrator | NONCAREER SES | $112,100 |
| Deputy Administrator | NONCAREER SES | $104,000 |
| Associate Administrator for Research, Tech & Analysis | NONCAREER SES | $ 94,400 |
| Director of Program & Policy Support | SCHEDULE C | $ 64,233 |
| Special Assistant | SCHEDULE C | $ 54,607 |

## RSPA SES POSITIONS

Mr. COLEMAN. Please provide a listing of all SES positions by position title and grade.

[The information follows:]

## SES POSITIONS

| POSITION TITLES | GRADE |
|---|---|
| **Headquarters, Washington, DC** | |
| Administrator | EX III |
| Deputy Administrator | ES-04 |
| Chief Counsel | ES-01 |
| Associate Administrator for Management and Administration | ES-05 |
| Associate Administrator for Pipeline Safety | ES-05 |
| Deputy Associate Administrator for Pipeline Safety | Vacant |
| Associate Administrator for Hazardous Materials Safety | ES-05 |
| Deputy Associate Administrator for Hazardous Materials Saf. | ES-02 |
| Associate Administrator for Research, Tech & Analysis | ES-03 |
| Deputy Assoc Admin for Research, Tech & Analysis | Vacant |
| Director, Office of Research Policy & Tech Transfer | Vacant |
| Deputy Director, Office of Research Policy & Tech Transfer. | ES-03 |
| Director, Transportation Safety Institute | Vacant |
| **Volpe National Transportation Systems Center, Cambridge, MA** | |
| Director | ES-05 |
| Deputy Director | ES-04 |
| Air Transportation Programs Manager | ES-04 |
| Director, Office of Plans and Programs | Vacant |
| Director, Office of Transport & Information Resources Mgmt. | ES-04 |
| Director, Office of Research & Analysis | Vacant |
| Director, Office of Operations Engineering & Assessment | ES-02 |
| Director, Office of Information Systems | Vacant |
| Director, Office of Systems Engineering | ES-02 |
| Director, Office of Administration | ES-02 |

## SES BONUS AWARDS

Mr. COLEMAN. Please update the data on SES bonus awards shown on pages 898–899 of last year's hearing record by providing data for each of fiscal years 1992 through 1995.

[The information follows:]

## SES BONUS AWARDS

**Fiscal Year 1992:**

(1) award of $13,158 @ 12.2% = $13,158

(1) award of $ 8,772 @ 8.1% = 8,772

(1) award of $ 8,424 @ 8.1% = 8,424

(1) award of $5,523 @ 5.1% = 5,523

(2) awards of $5,304 @ 5.1% = 10,608

$46,485

**Fiscal Year 1993:**

(2) awards of $7,480 @ 6.7% = $14,960

(2) awards of $5,365 @ 5.0% = 10,720

$25,680

**Fiscal Year 1994**: Estimated amount for bonus awards $25,680

**Fiscal Year 1995**: Estimated amount for bonus awards $25,680

## COMMUNICATIONS AND OTHER ESTIMATES

Mr. COLEMAN. Please provide a breakdown of your fiscal year 1994 and 1995 budgets for communications, utilities and miscellaneous charges, similar to that shown on pages 900–901 of last year's hearing record.

[The information follows:]

Research and Special Programs

(dollars in thousands)

| | FY 94 Est. | FY 95 Est. |
|---|---|---|
| In–house copiers and graphics | 423 | 460 |
| DOT day care policy | 3 | 2 |
| Central Employ, Info. Ofc. | 3 | 6 |
| Communications | 607 | 878 |
| Health & Fitness | 19 | 4 |
| Library | 122 | 93 |
| Parking Management | 15 | 18 |
| Mail/Messenger | 28 | 32 |
| OSHA | 10 | 4 |
| Security | 53 | 55 |
| Space Consolidation Team | 50 | 37 |
| Building Management | 71 | 90 |
| Motor Pool | 26 | 13 |
| Warehouse | 15 | 40 |
| Mail | 200 | 227 |
| Securities & Investigations | 45 | 47 |
| Workers Comp/Unemployment | 132 | 150 |
| Coast Guard Clinic | 27 | 27 |
| Uniform Payroll System | 57 | 57 |
| Employee Counseling Services | 18 | 15 |
| Civil Rights Programs | 9 | 5 |
| OST Reimbursables | 46 | 64 |
| DAFIS Charges/Imprest Fund | 57 | 103 |
| Total | 2,036 | 2,427 |

Pipeline Safety

(dollars in thousands)

|  | FY 94 Est. | FY 95 Est. |
|---|---|---|
| In–house copiers and graphics | 273 | 278 |
| DOT day care policy | 2 | 2 |
| Central Employ, Info. Ofc. | 2 | 2 |
| Communications | 341 | 398 |
| Health & Fitness | 10 | 2 |
| Library | 73 | 33 |
| Parking Management | 8 | 10 |
| Mail/Messenger | 15 | 15 |
| OSHA | 5 | 2 |
| Security | 30 | 30 |
| Space Consolidation Team | 26 | 26 |
| Building Management | 89 | 89 |
| Motor Pool | 14 | 4 |
| Warehouse | 8 | 8 |
| Mail | 118 | 125 |
| Securities & Investigations | 29 | 13 |
| Workers Comp/Unemployment | 83 | 9 |
| Coast Guard Clinic | 18 | 18 |
| Uniform Payroll System | 38 | 10 |
| Employee Counseling Services | 10 | 10 |
| Civil Rights Programs | 5 | 5 |
| OST Reimbursables | 47 | 23 |
| DAFIS Charges/Imprest Fund | 30 | 33 |
| Total | 1,274 | 1,143 |

## SLUC CHARGES

Mr. COLEMAN. Please update the data on field and headquarters standard level user charges shown on page 903 of last year's hearing record.

[The information follows:]

## Standard Level User Charges
## 'RSPA-Headquarters

| | FY 1989 actual | FY 1990 actual | FY 1991 actual | FY 1992 actual | FY 1993 actual | FY 1994 estimate | FY 1995 estimate |
|---|---|---|---|---|---|---|---|
| Square Footage | 46,716 | 52,375 | 52,926 | 56,098 | 62,690 | 62,690 | 62,895 |
| Authorized Positions | 179 | 189 | 203 | 233 | 238 | 239 | 254 |
| Other Than Full-Time Permanent Contractors | 150 | 167 | 185 | 213 | 231 | 238 | 212 |
| Utilization Rate | 142 | 147 | 136 | 125 | 133 | 132 | 134 |
| SLUC Charges (in thousands)** | 1,047 | 1,288 | 0 | 0 | 0 | 0 | 0 |
| Avg. SLUC per SQ Footage ** | 22 | 25 | 0 | 0 | 0 | 0 | 0 |

** SLUC funds were requested in OST's budget

## Standard Level User Charges
## 'RSPA-Field Offices

| | FY 1989 actual | FY 1990 actual | FY 1991 actual | FY 1992 actual | FY 1993 actual | FY 1994 estimate | FY 1995 estimate |
|---|---|---|---|---|---|---|---|
| Square Footage | 6471 | 6,406 | 7,478 | 7,918 | 9,418 | 11,114 | 12,066 |
| Authorized Positions | 25 | 25 | 31 | 42 | 49 | 58 | 74 |
| Other Than Full-Time Permanent Contractors | 0 | 0 | 0 | 0 | 4 | 11 | 18 |
| Utilization Rate | 259 | 256 | 241 | 188 | 177 | 161 | 131 |
| SLUC Charges (in thousands)** | 48 | 52 | 0 | 0 | 0 | 0 | 0 |
| Avg. SLUC per SQ Footage ** | 7 | 7 | 0 | 0 | 0 | 0 | 0 |

** SLUC funds were requested in OST's budget

## OTHER SERVICES COSTS

Mr. COLEMAN. Please provide a detailed list of your "other services" costs for each of fiscal years 1993–1995, similar to the table shown on page 905 of last year's hearing record.

[The information follows:]

## RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION
(dollars in thousands)

| | FY 1993 Enacted* | FY 1994 Enacted | FY 1995 Request |
|---|---|---|---|
| ***Hazardous Materials Safety*** | | | |
| Information Systems | 1,000 | 950 | 1,000 |
| Research and Analysis | 300 | 300 | 300 |
| Inspection and Enforcement | 140 | 220 | 230 |
| Rulemaking Support | 550 | 550 | 550 |
| Hazmat Training | 350 | 350 | 350 |
| Information Dissemination | 170 | 170 | 170 |
| Emergency Preparedness | 250 | 250 | 370 |
| Sanitary Food Safety | 150 | 75 | 0 |
| International Standards | 0 | 140 | 140 |
| Registration Program | 1,232 | 1,000 | 1,050 |
| Research and Development | 1,334 | 1,364 | 1,400 |
| ***Aviation Information Management*** | | | |
| Research/Systems Analysis | 18 | 18 | 18 |
| Enforcement | 30 | 30 | 30 |
| Data Services Consultation | 24 | 24 | 24 |
| Information Processing | 228 | 217 | 217 |
| Electronic Tariffs** | 1,000 | 1,000 | 1,000 |
| ***Emergency Transportation*** | | | |
| Operational Readiness | 38 | 80 | 80 |
| Transportation Resource Mgmt | 50 | 0 | 50 |
| Crisis Management | 0 | 85 | 454 |
| Research and Development | 0 | 0 | 50 |
| ***Research and Technology*** | | | |
| Research and Development | 350 | 500 | 1,390 |
| ***Program Support*** | | | |
| Policy and Program Support | 0 | 0 | 50 |
| Civil Rights & Special Programs: | 9 | 9 | 74 |
| Program Mgmt and Administration: | 178 | 427 | 623 |
| ***Pipeline Safety*** | | | |
| Information Systems | 402 | 402 | 752 |
| Risk Assessment & Tech Studies | 97 | 355 | 250 |
| Compliance | 76 | 76 | 375 |
| Training & Info. Dissemination | 855 | 925 | 871 |
| Emergency Notification | 100 | 100 | 100 |
| Implementation of Oil Pollution Act | 0 | 2,268 | 2,520 |
| Research and Development | 500 | 875 | 1,123 |

* Includes Congressional reprogramming.

** Electronic Tariffs $1 million contract program is fully funded by a credit in the appropriation language, which is treated as an offsetting collection.

## RSPA TRAINING EXPENSES

Mr. COLEMAN. Please provide a breakdown of training expenses (e.g., in-house, external, interagency, etc.) for fiscal years 1993 and 1994, and estimated for fiscal year 1995.

[The information follows:]

RESEARCH & SPECIAL PROGRAMS ADMINISTRATION

| | Fiscal year— | | |
|---|---|---|---|
| | 1993 actual | 1994 estimate | 1995 estimate |
| Training expense: | | | |
| External | 56,926 | 29,586 | 45,000 |
| Interagency | 19,253 | 22,622 | 58,000 |

## PROGRAM SUPPORT SALARIES

Mr. COLEMAN. For each of the 45 positions shown on page 99 of your justifications under "program and administrative support," please list their title and salary level, similar to the data shown on page 418 of last year's hearing record.

[The information follows:]

Base salary figures do not include Washington, DC locality pay.

## EXECUTIVE DIRECTION

| | |
|---|---|
| Administrator | 123,100 |
| Deputy Administrator | 107,300 |
| Special Assistant | 66,609 |
| Secretary | 36,986 |
| Secretary | 39,783 |

## POLICY AND PROGRAMS

| | |
|---|---|
| Director of Policy and Program Support | 92,900 |
| Program Analyst | 71,456 |
| Program Analyst | 60,403 |
| Writer/Editor | 44,327 |

## CIVIL RIGHTS

| | |
|---|---|
| Equal Opportunity Specialist | 66,899 |
| Equal Opportunity Specialist | 33,623 |

## CHIEF COUNSEL

| | |
|---|---|
| Chief Counsel | 92,900 |
| Supervisory Attorney-Advisor | 82,474 |
| Supervisory Attorney-Advisor | 81,796 |
| Attorney-Advisor | 76,144 |
| Attorney-Advisor | 67,919 |
| Attorney-Advisor | 58,515 |
| Attorney-Advisor | 53,510 |
| Attorney-Advisor | 49,517 |
| Attorney-Advisor | 47,013 |
| Attorney-Advisor | 47,013 |
| Attorney-Advisor | 40,298 |
| Attorney-Advisor | 38,107 |
| Administrative Assistant | 36,723 |
| Secretary | 28,016 |
| Clerk-Typist | 19,669 |

## MANAGEMENT AND ADMINISTRATION

| | |
|---|---|
| Associate Administrator | 111,800 |
| Resource Management Officer | 78,919 |
| Personnel Officer | 75,799 |
| Contract Officer | 71,049 |
| Assistant Personnel Officer | 70,965 |
| Management Analyst | 70,477 |
| Financial Manager | 69,842 |
| Computer Specialist | 66,974 |
| Administrative Services Manager | 60,403 |
| Assistant Contract Officer | 60,301 |
| Personnel Management Specialist | 51,114 |

| | |
|---|---|
| Budget Analyst | 49,517 |
| Support Services Specialist | 49,517 |
| Contract Specialist | 47,920 |
| Contract Specialist | 40,298 |
| Program Analyst | 38,107 |
| Personnel Management Specialist | 34,744 |
| Accountant | 30,567 |
| Secretary | 30,287 |

## RSPA POSITIONS AND FTE'S

Mr. COLEMAN. Please provide a table that provides positions and full-time-equivalent employees by major organizational unit for each of fiscal years 1993 through 1995.

[The information follows:]

**RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION**

Full Time Permanent Positions and Full Time Equivalent Workyears

| | FY 1993 | | FY 1994 | | FY 1995 | |
|---|---|---|---|---|---|---|
| | FTP | FTE | FTP | FTE | FTP | FTE |
| *Hazardous Materials Safety* | 118 | 113 | 116 | 111 | 111 | 107 |
| *Aviation Information Management* | 35 | 34 | 35 | 33 | 29 | 27 |
| *Emergency Transportation* | 7 | 7 | 7 | 7 | 7 | 7 |
| *Research and Technology* | 13 | 13 | 13 | 13 | 13 | 13 |
| *Program Support** | 42 | 51 | 45 | 53 | 45 | 53 |
| *Transportation Safety Institute* | 0 | 0 | 0 | 0 | 37 | 37 |
| *Pipeline Safety* | 72 | 69 | 72 | 72 | 75 | 75 |
| *The Volpe Center* | 515 | 576 | 515 | 576 | 515 | 576 |
| RSPA Total = | 802 | 863 | 803 | 865 | 832 | 895 |

* Includes a RSPA-wide pool of 10 FTE.

## PERSONNEL SAVINGS

Mr. COLEMAN. The National Performance Review included recommendations to streamline agency administration operations, including personnel and procurement procedures. In light of these "reinventing government" proposals, why doesn't the fiscal year 1995 RSPA request include personnel savings under program and administrative support?

[The information follows:]

RSPA continually reviews its operations to ensure support functions are optimized and that existing resources are utilized efficiently. Currently, our support operation is very lean, having one of the lowest support staff to full staff ratios in DOT. Therefore, though reducing support personnel can be damaging to agency operations, we believe the benefits of the NPR will be in keeping previously anticipated increases minimized in future years.

## RSPA UNOBLIGATED BALANCES

Mr. COLEMAN. Please provide a breakdown of any unobligated balances carried forward into fiscal year 1994 by type or source of the balance.

[The information follows:]

[In millions of dollars]

| *Funding source* | *Amount unobligated* |
|---|---|
| Volpe Center: | |
| Non-DOT | 79.6 |
| FAA | 45.6 |
| Other DOT | 24.7 |
| USCG | 17.5 |
| SBIR Pgm | 9.0 |
| FTA | 7.4 |
| Subtotal | 183.8 |
| Research & Special Programs | 1.7 |
| Pipeline Safety | .5 |
| Alaska Pipeline Task Force | .5 |
| Total | 186.5 |

## ACCOUNTING SERVICES

Mr. COLEMAN. You are asking for $138,000 to pay for accounting services provided by the Departmental Accounting and Financial Information System (DAFIS) operated by the Federal Aviation Administration. RSPA also operates its own accounting system to track funds. Why do you still need a separate system?

[The information follows:]

The $138,000 requested is to pay the Federal Aviation Administration (FAA) to provide accounting services to RSPA. Using the Departmental Accounting and Financial Information System (DAFIS), the FAA obligates and pays RSPA invoices; collects RSPA's receipts; prepares reports to Treasury and OMB; and interfaces with vendors.

RSPA does not operate its own accounting system. Rather, RSPA's internal system, which is used to track commitments and obligations only, allows senior management the tools they need to have immediate access to financial data which is not available through DAFIS.

Mr. COLEMAN. What is the estimated cost of operating your internal system?

[The information follows:]

The estimated cost is approximately $7,000. These funds are used to pay a contractor for improvements to the RSPA system.

Mr. COLEMAN. What would be the impact if the subcommittee stipulated that its approval of these payments for accounting services to DAFIS was conditional on RSPA ceasing to operate its own system?

[The information follows:]

Since RSPA does not perform its own accounting function, the funds to pay the FAA to provide accounting services to RSPA is a necessity. If the Subcommittee does not provide the funds for RSPA to operate its internal tracking system, management would not have the tools it needs to be able to make informed financial decisions in a timely manner. This could lead to possible anti-deficiency violations.

### AIRLINE STATISTICS—MECHANICAL DELAYS

Mr. DELAY. With regards to airline statistics, it is my understanding that weather is included when determining on-time statistics for the traveling public. This is logical since weather dictates the ability of air carriers to operate.

This past winter, for example, was particularly hard on those carriers that primarily operate in the northern part of the country because of all of the storms. It has come to my attention, however, that RSPA is currently considering mechanical delays as part of the "on time" statistics. If this is true, I feel that this creates a whole new dilemma for the airlines.

If mechanical delays are factored into on-time statistics, air carriers may be more inclined to rush mechanical maintenance and repair to get a plane back in service rather than to postpone a fight in order to perform complete, proper and timely mechanical service. It is obvious to me that air carriers want to stay in business and want to keep their aircraft in top mechanical condition. I also believe that the flying public is best served by air carriers that perform mechanical service as necessary rather than under the pressure of a time constraint, which is what inclusion of mechanical delays would cause.

Why is RSPA considering mechanical delays as part of the on-time statistics?

[The information follows:]

The Inspector General performed an audit on the air carriers on-time performance reports and concluded that the department was overly relying on the integrity of reporting air carriers. The department had no readily available means to verify that a flight not reported because of a mechanical actually experienced a mechanical delay. This significant rule is still in DOT clearance. No final decisions have been made.

### AIM—STATUS OF PROPOSED RULE

Mr. DELAY. You stated last year that the proposed rulemaking would be finalized by the end of fiscal year 1993. Where in the process is the rulemaking today?

[The information follows:]

RSPA anticipates that the rule will be issued by the end of July 1994.

Mr. DELAY. Last year, the Chairman asked a question for the record regarding the air carriers' opinion on the possible inclusion of mechanical delays. Out of the six carriers polled, and the Air Transport Association, many of the carriers expressed serious safety concerns and others expressed confidentially of statistics reported.

Isn't this another form of micro-managing the affairs of the air carriers?

[The information follows:]

Based on safety concerns Northwest, Southwest and America West filled comments opposing the department's proposal to eliminate the mechanical exclusion. The Air Transport Association of America (ATA) which represents 17 air carriers, American and Delta filed comments in support of including flights impacted by mechanical delays in the carriers' on-time flight performance. They contend the elimination of the exclusion would not compromise safety.

ATA said that it does not believe the elimination of the exclusion will adversely affect reporting air carriers or the travelling public. The inclusion of mechanical-delay and mechanical-cancellation information will give those interested in air carrier flight performance a better picture of flight delay and cancellation activity. The safety of passengers and crew is the most important responsibility of air carriers. ATA states that carriers devote enormous resources and attention to fulfilling that responsibility. ATA does not believe the elimination of the mechanical-delay and mechanical-cancellation exclusion will induce ATA members to dispatch aircraft that are not air worthy, or have any other adverse effect upon aviation safety.

American said it believes carriers would not risk safety for competitive reasons. Reporting all flights would "provide consumers with a more accurate picture of a carrier's overall on-time record, which is the reason for the rule in the first place.

Delta stated that it has incurred considerable unnecessary expense to exclude the mechanical delays and mechanical cancellations, and argues that their inclusion will not have a negative effect on the safety of airline operations.

Under the department's proposal all delays would be treated and reported alike. There are no concerns over the confidentiality of mechanical-delay information because no one could distinguish a mechanical delayed flight from another delayed flight.

The intent of the on-time performance rule is to provide consumers with information on which to make flight and carrier selections. The added reporting will provide the consumer with more reliable data on which to make these selections. It is not micro-managing the air carrier, since the carriers' still decide their own flight scheduling.

### PIPELINE SAFETY OFFICE—TEXAS

Mr. **DeLay**. It is my understanding that the Pipeline Safety Office in Houston, Texas, has not come on line yet and has experienced delays. Could you comment on the status and future responsibility of this office?

[The information follows:]

The RSPA pipeline safety office in Houston has been operational for a number of years. The new office in the RSPA hazardous materials enforcement program's Southwest Region office, which is co-located with the pipeline safety office. The office began operations in late September 1993. Staffed with two inspectors, the office conducts compliance inspections of hazardous materials packaging manufacturers and shippers, cylinder retesters, drum reconditioners, exemption holders, non-vessel-operating common carriers, and shipment observation inspections in the ports of Houston, Mobile, and New Orleans. The office covers Alabama, Arkansas, Louisiana, Mississippi, New Mexico, Oklahoma, Tennessee, and Texas. It also acts as RSPA liaison with hazardous materials enforcement agencies in those states, providing information dissemination, limited training, and other assistance.

### NTSB RECOMMENDATIONS

Mr. **Price**. The National Transportation Safety Board included in the Most Wanted Transportation Safety Improvements requiring excess flow valves for high pressure residential natural gas distribution systems. Following up on the list, the NTSB wrote RSPA a February 7, 1994 letter about RSPA's NPRM, Crashworthiness Protection for Tank Cars, and a March 17, 1994 letter about RSPA's NPRM, Detection and Repair of Cracks, Pits, Corrosion, Lining Flaws, Thermal Protection Flaws, and other Defects of Tank Car Tanks.

Would you tell the Subcommittee how you responded to the NTSB recommendations?

[The information follows:]

In letters dated February 7 and March 17, 1994, the National Transportation Safety Board (NTSB) provided comments to the Research and Special Programs Administration's (RSPA's) notices of proposed rulemaking (NPRM) which address "Crashworthiness Protection Requirements for Tank Cars", Docket No. HM-175A, and "Detection and Repair of Cracks, Pits, Corrosion, Lining Flaws, Thermal Protection Flaws, and other Defects of Tank Car Tanks" Docket HM-201. In both letters, NTSB supported the goals of the NPRMs and offered specific comments on sections of the rulemakings.

The comment period for both NPRMs closed on March 16, 1994. RSPA and the Federal Railroad Administration are evaluating all comments, and will develop a course of action based on the results of that review.

Mr. PRICE. In its Most Wanted List, the NTSB encouraged RSPA to work with the American Gas Association to make sure excess flow valves are installed in high-pressure residential natural gas distribution systems. Will you tell the Subcommittee if you share the NTSB's belief in excess flow valves, and if so, how you are implementing the recommendation?

[The information follows:]

In the past, RSPA has not been in favor of installing excess flow valves because the valves have not always worked reliably. Instead, RSPA has preferred other safety alternatives, such as one-call damage prevention programs.

However, under the mandate in the 1992 Pipeline Safety Act, RSPA is now acting as an "honest broker" by bringing all interested parties together to determine if excess flow valves should be required and, if so, under what conditions. Toward this end, RSPA published an NPRM (April 21, 1993; 58 FR 21524) proposing circumstances under which excess flow valves may be required. Because of the extent of comments, we are preparing a Supplemental Notice of Proposed Rulemaking. Concurrently, two industry safety committees are preparing standards for testing, fabricating, and using excess flow valves. The American Gas Association membership is involved in preparing these standards. RSPA believes such standards should be completed before excess flow valve installation is required.

Mr. PRICE. On page 3 of your written testimony, you refer to the Colonial pipeline spill in Reston, Virginia. The spills in Reston and Pasadena, Texas were both in residential areas but the public reaction differed dramatically. Does public tolerance of spills vary by geographical region? Are you addressing this issue in the analysis in which you balance environmental and public safety?

Reaction does vary, and while it may appear that the variance does break down along geographical lines, in fact it is more likely due to the fact that in some parts of the country, pipelines and the products they carry are more critical to the economic viability of the area. For example, there have been accidents in both Texas and Oklahoma which were as potentially damaging as the Colonial spill, but the people most affected by the spills derived their livelihood from the oil and pipeline industry. In addition, the political leadership of these regions are more aware of the operations of pipelines and the value they bring to the local economies; in Northern Virginia the political leadership represents citizens who are more concerned about pipeline safety and environmental integrity because they are not as well versed in pipeline operations and the contribution they make to the national economy, and they do not benefit directly from the business of pipelines.

In developing our risk assessment prioritization model by which we will identify all pipeline risks, their solutions, and the costs to implement solutions, we will include what some risk assessment experts call the "outrage factor." Looking at risk as a function of probability and consequence, it is clear that one of the consequences of a risk becoming reality is the degree of outcry that comes from citizens, their representatives in Congress and in state legislatures, and the media. There is value in avoiding this consequence because time spent on communicating on what we are doing and why following an accident, detracts from our primary role which is to take all steps necessary to remediate the failed pipeline and assure its future safe operation.

## OFFSHORE PIPELINE INSPECTIONS

Mr. PRICE. The Pipeline Safety Act of 1992 requires pipeline operators to inspect offshore pipelines and pipelines in environmentally sensitive areas. Will you tell the Subcommittee what the Office of Pipeline Safety and oil and gas pipeline companies have learned from the companies' pipeline inspections?

What percentage of pipelines was exposed or a hazard to navigation? Has all the hazardous pipeline been re-buried?

[The information follows:]

OPS has learned that only one and a half percent of offshore gas transmission and hazardous liquid pipelines were exposed or a hazard to navigation. At this time, about one mile of pipeline is not yet sufficiently buried, but it is not in an area where it could be a hazard to navigation.

## PRIVATE CONTRACTORS—CONFLICT OF INTEREST

Mr. PRICE. On page 8 of your written testimony, you ask for funds to hire private contractors to watch remedial tests that compliance requires including hazardous facility orders and new construction inspections.

Will you respond to the concern that private contractors may have a conflict of interest between contracts with RSPA and with private transportation companies?

[The information follows:]

Restrictions would be included in the contract to avoid any conflict of interest that a contractor might have between working for RSPA and working for private transportation companies. The need for having contractor personnel available is sporadic, depending on the phase of new construction, the timing of remedial testing, and the occurrence of accidents. Further, a contract will provide RSPA with flexibility in obtaining specific expertise (which may not be available inhouse) on an as-needed basis.

Mr. PRICE. Is it more or less expensive in the long run to have RSPA employees do this work?

[The information follows:]

In the long run, it is likely to be less expensive using contractor personnel rather than full-time RSPA inspectors to perform the majority of new construction inspections, witness certain remedial testing, and assist in accident investigations.

Mr. PRICE. Are private contractors hired to inspect other transportation modes?

[The information follows:]

We are presently aware that RSPA's Office of Hazardous Materials Safety and Federal Highway Administration's Office of Motor Carriers use contract services in support of their inspection functions.

## FUNDING FOR PUBLIC SERVANTS

Mr. PRICE. Could the money needed to hire public servants be taken from the increases in funds requested for research and development and information gathering and management?

[The information follows:]

Diverting funds from research and development and information gathering and management to hire additional inspectors would only delay our ability to successfully achieve these multi-year goals.

## ONE-CALL DEVELOPMENT

Mr. PRICE. On page 4 of your written testimony, you discuss the need to promote comprehensive one-call systems. Given the fact that excavators may cause up to 40 percent of the fatalities, injuries, and property damage in incidents involving pipelines, do you think $100,000 is enough to help States develop the systems?

[The information follows:]

The $100,000 earmarked for special projects would be used as start-up funding just to help states develop these projects. Once underway, we would hope that states would seek partnerships with industry and among state agencies to increase public awareness of the one-call system and its value.

## HAZMAT FEES

Mr. PRICE. On page three of your written testimony, you mention the $8 million for pipeline grant funds to support State programs that user fees offset.

Do you think it is fair or advisable for major companies and small businesses transporting certain amounts of hazardous material to pay a flat $300 fee?

Wouldn't it make sense to use the authority under the Hazardous Materials Transportation Act to assess up to $5000 for companies transporting the largest quantities of hazardous material?

[The information follows:]

During the initial phase of the registration program we believed a flat fee of $300 for all registrants would be sufficient to fully fund the grant program. We currently have 26,000 entities registered, which is less than originally anticipated. With these data, we are now considering different options for increasing fees in a equitable manner. Increasing the fee of $5,000, as provided in the HMTA, will be considered for some registrants.

Mr. PRICE. Can you tell the Subcommittee why you did not take the Hazardous Materials Office's recommendation to replace the $300 fee with a graduated system based on the amount of hazardous material carried? Doesn't it make sense to have the largest hazardous material carriers bear the greatest financial burden?

[The information follows:]

As stated above, consideration is being given to a range of options including a graduated system of fees. RSPA believes that there should be a relationship between the burdens placed on the emergency response system and the fees charged. This will be considered as we proceed with the program.

Mr. PRICE. Wouldn't the graduated system pay for the training States and local governments desperately need for their fire fighters and police forces? Doesn't the 30 percent shortfall in training funds hurt the States' and local governments' ability to respond to spills?

[The information follows:]

The DOT planning and training grants are intended to augment the state's and local government's emergency preparedness efforts. We will review the program to see if additional funds can be allocated. A notice of proposed rulemaking was published on April 1, 1994, to improve compliance with the registration requirements.

## COMMUNICATIONS—RSPA/USCG/FAA

Mr. PRICE. On page 11 of your written testimony, you refer to integrating RSPA, Coast Guard, and Federal Aviation Administration communications. I understand that RSPA works closely with the Coast Guard in protecting human lives, the environment, and property.

Will you tell the Subcommittee how the two agencies divide responsibilities, if your relationship has improved over the last few years, and the lessons RSPA and the Coast Guard have learned from and taught each other?

[The information follows:]

The reference in the testimony refers to fully integrating the capabilities of RSPA, FAA, and USCG into the DOT Headquarters Crisis Management Center to insure that the Secretary and other key officials are notified of emergencies promptly and can communicate in a disaster. In this narrow context, RSPA relies upon the Command Center in Coast Guard Headquarters to monitor the news media and field reports on a 24 hour basis. The Command Center notifies the DOT Emergency Coordinator of actual or impending emergencies that could adversely affect transportation. We have always enjoyed a very cooperative relationship with Coast Guard and generally receive the first notice of most emergencies from their Command Center. In regard to what we have learned from Coast Guard, we are using the Coast Guard operations center as one model for our modernization of the Crisis Management Center in DOT Headquarters and for development of an automated geographic based Emergency Information System. In turn, the Secretary's emphasis on robust, proactive emergency response, as implemented through RSPA, has served to energize the Coast Guard's own crisis management programs, bringing more top level executive support for communications, emergency notification, response teams, training and exercises, and other vital elements of emergency preparedness.

## INDUSTRY ROLE IN REGULATION DEVELOPMENT

Mr. PRICE. One definition of economics is allocating scarce resources. On page 10 of your written testimony, you state the commitment to transfer research results to users, to increase outreach, and to share information with the transportation industry.

Not only in R&D, but across your missions, how do you work with the industries you oversee to make sure they play an integral role in developing and implementing regulations that protect the environment and human life?

[The information follows:]

RSPA puts a great deal of emphasis on continued two-way interactions with the transportation and manufacturing industries. We try to reflect their needs in development of our programs and regulations, and to make information about regulations and programs which affect them available quickly, and in a form they can understand.

As an example, the centralized Technology Sharing Activities which RSPA administers have been operating for more than twenty years. The program queries the full range of transportation users about their needs and concerns, and tries to reflect them in the formulation of DOT's R&D projects. Likewise, Technology Sharing packages the results of selected DOT research projects which address the concerns raised, and then disseminates this material to state and local officials, transportation operators, the supplier industry, and other members of the user community.

There have been a series of outreach seminars to the user community on proposed Departmental initiatives. Recent topics covered have been the prospects for defense conversion, and needed research priorities for the transportation sector as a whole. The proposed outreach activities in this year's budget will build on this tradition, and will include a national symposium specifically dedicated to transportation technology.

In RSPA's regulatory activities, we make it a point to involve industry in the development of regulations, to give them ample opportunity to comment on the draft regulations, and to broadly promulgate the completed regulations in their final form.

## USE OF RESOURCES OUTSIDE RSPA

Mr. PRICE. We talked about your work with the Coast Guard earlier. What steps have you taken to use the Volpe Center, the Defense Department, and other Federal agency resources to further your work most effectively?

[The information follows:]

As part of the activities of the National Council for Science and Technology, an Interagency Coordinating Committee on Transportation R&D has been created. Chaired by DOT, this group has oversight of transportation-related research throughout the Executive Branch.

Much of the analytical support of this effort has originated from various sources within RSPA, including the Volpe Center. One particular highlight occurred this February the Committee sponsored a workshop through the Volpe Center to establish priorities for transportation R&D throughout the Federal Government. The results of this workshop will be used by the Office of Management and Budget and the Office of Science and Technology Policy in developing R&D program budget guidance for all Federal executive agencies.

A particular emphasis of recent RSPA activities has been defense conversion. RSPA has been working closely with ARPA on its Technology Reinvestment Program, and with NIST on its Advanced Technology Program. DOT's program goal has been to "steer and guide" funding under these activities to address important transportation problems. The strategy has proven quite successful. In the first three announcements of awards under the TRP program, over $400 million in project activities have been transportation-related.

## EDISON ACCIDENT

Mr. PRICE. I understand Texas Eastern Transmission Corporation, the operator of the natural gas pipeline that exploded last month, asked a Federal judge to dissolve a State court order prohibiting the company from restarting the repair line.

Will you tell the Subcommittee what lessons we can learn about pipeline safety from the incident?

[The information follows:]

The incident is currently being investigated by OPS and NTSB and is not complete. Therefore, not all the lessons we can learn are complete. However, based on the preliminary results, this accident reaffirmed the necessity for OPS to complete its studies for the need of additional inspection requirements for high population density areas, the need for improved state legislation for underground damage prevention, and to look more closely at transmission valve requirements. In addition, the necessity and value of complete and accurate maps has been demonstrated by this accident, both with respect to the effective application of local land use controls, but also for informing citizens of the potential risks they face in living close by a pipeline.

Mr. PRICE. Will you characterize the operator's response?

[The information follows:]

At this time, OPS and NTSB are still reviewing the operator's response to the accident. OPS is concerned that it took nearly 3 hours to completely close the valves to shut off gas at the accident site. This remains an ongoing focus of the investigation.

Mr. PRICE. How will the Office of Pipeline Safety respond if the mayor of Edison, New Jersey, asks you to help persuade the pipeline company not to restart the pipeline?

[The information follows:]

OPS was in contact with the Mayor's office or other city officials on almost a daily basis for the first 3 weeks after the accident. Texas Eastern and the Mayor of Edison ultimately reached an out of court settlement concerning several issues, including restart of the line. The Mayor did not request OPS to intercede in the negotiations between the township and Texas Eastern or the court proceeding.

Mr. WOLF. About one year ago, the Colonial pipeline accident in Reston, Virginia, spilled over 400,000 gallons of diesel fuel into Sugarland Run and the Potomac River in Northern Virginia.

With over 1.8 million miles of natural gas and hazardous liquid pipelines in this country, this accident raised critical safety and environmental concerns. The explosion of a gas pipeline in New Jersey last month renewed safety concerns.

The National Transportation Safety Board's metallurgical report on the Colonial spill suggested that mechanical damage was the cause of the pipeline failure. Are you aware whether or not this has been attributed to third party damage?

[The information follows:]

NTSB has not attributed the mechanical damage to a particular category of activity. However, in its own analysis of observations at the failure site, OPS believes that there is sufficient evidence of damage to the pipeline at locations where storm drainage was installed over the pipeline to conclude that the damage that caused the failure occurred during operation of heavy mechanical equipment for the installation of the storm drainage in the mid-1980's.

Mr. WOLF. The initial reports from the New Jersey explosion indicate that the cause may be a small gouge in the pipe caused by construction activity in the area. From your preliminary investigation, do you have any reason to doubt this assessment?

[The information follows:]

The preliminary investigation by OPS confirms that the origin of the failure was a gouge created by contact with the pipe by heavy mechanical equipment. There is insufficient evidence to ascribe the damage to construction activity because routine operations at the site, an asphalt plant, involve the use of heavy mechanical equipment. At this time, the cause of the failure at the gouge is undetermined.

## PIPELINE SAFETY—EXCAVATION DAMAGE

Mr. WOLF. During testimony at our hearing last year, RSPA indicated that the single leading cause of pipeline failure in the U.S. is somebody hitting the pipeline. There are obviously inherent dangers that accompany the use of pipelines, but that does not seem to be what is bedeviling us. Our safety problems seem to be coming from carelessness.

You indicated in your testimony that RSPA is focusing on pipeline safety, and I wonder what you are doing to prioritize this issue of excavation damage which is the number-one cause of our problems.

[The information follows:]

OPS has launched a national campaign to encourage states to adopt improved one-call notification systems and has hired a consultant to coordinate start-up of the campaign. A major component of the campaign is working with other interested parties to marshal available resources and garner support for strengthening one-call systems. The campaign is being given priority attention as an initiative in the Department's Strategic Plan under Goal 4, to promote safe and secure transportation. Of all the pipeline safety initiatives in the Strategic Plan, improving one-call systems may potentially have the highest payoff in terms of reducing pipeline fatalities, injuries, and property damage.

## ONE-CALL SYSTEMS AND CIVIL PENALTIES

Mr. WOLF. Your budget justifications indicate that seven States do not have one-call systems and 30 States do not have the level of civil penalty authority mandated by the statute. Wouldn't this be a good place to start in attacking the problem? And shouldn't both pipeline operators and construction contractors be required to participate?

[The information follows:]

As part of the national campaign to improve one-call notification systems, OPS will be targeting selected states to "attack the problem" based on the need to strengthen one call in the state, the prospect of receptivity in the state to outside assistance, and the likelihood of being able to effect some improvement. The OPS Regional Directors have already preliminarily identified ten states, and we are in the process of refining the list.

OPS has identified a model state one-call system as having the following four key features: mandatory participation by all underground facility operators in the state; no exceptions for any type or class of excavators; meaningful, easily enforced sanctions against violators; and aggressive promotion of public awareness of the benefits of "calling before you dig."

Ultimately, one-call systems must include not only pipelines, but all underground facilities. Of all industries with underground facilities, only pipeline operators have fully supported one-call nationwide and worked for its establishment and expansion. In fact, what is lacking in one-call today, does not involve pipeline operations, and the national focus must recognize this fact.

Mr. WOLF. It would seem that what is needed is universal participation and violation penalties. Are you contemplating legislation to address this problem, which could put some teeth into compliance by perhaps assessing civil penalties whenever negligence is determined?

[The information follows:]

We agree that universal participation and violation penalties are critical to our fight against the excavation damage problem. We are working toward that end with the states in setting broad goals but providing states latitude to develop such programs without constricting regulations or legislation.

Using our present legislative authority, we have issued regulations (49 CFR Part 198) that require states participating in the Department's pipeline safety grant program to have one-call damage prevention programs that are enforced against excavators by civil penalties and injunctions. This year we plan to propose additional regulations to ensure that interstate and intrastate pipelines participate in one-call systems that cover the areas where their pipelines are located.

With regard to legislation, we are examining existing legislation to determine whether it is effective. We will likely include one-call legislative initiatives in the Departmental legislative package being developed for the next pipeline safety reauthorization due for FY 1995.

### COSTS OF COLONIAL ACCIDENT

Mr. WOLF. What has been the cost of the government's response to the Colonial spill, including the investigative work of both NTSB and RSPA? Should the pipeline operator and/or the construction contractor be held accountable for these costs?

[The information follows:]

It is estimated that $250,000, for salaries and administrative expenses, has been spent on the post Colonial investigations. RSPA does not have the authority to seek reimbursement for its costs. A method to account for and recover the extraordinary costs of major accident investigations is among the issues RSPA is considering following the Colonial and Texas Eastern accidents. The investigation is not closed and additional costs will continue to be incurred. In addition to the costs, the time devoted to these major investigations prevents OPS with the existing available staff to fully carry out its risk based inspection program and congressionally mandated rules and studies on schedule.

Mr. WOLF. In testimony last year, RSPA estimated that the cost of the Colonial cleanup will amount to about $10 million. Is that still your best estimate?

[The information follows:]

Yes, based upon the latest analysis, and in consultation with Colonial, we believe that the $10 million estimate is accurate.

## SPILL LIABILITY

Mr. **WOLF**. In those cases where third-party responsibility is determined, should those companies or individuals be held financially liable?

[The information follows:]

Presently, civil tort liability varies from state to state but it can be an effective motivator for compliance. The level of contractor liability depends on a number of factors including whether the underground facility operator properly marked its line and whether the contractor exercised due caution in excavating. As part of our national campaign to strengthen one-call systems, we will assess the various one-call enforcement and compliance measures currently being used in the states to determine their effectiveness. That assessment will provide a determine their effectiveness. That assessment will provide a basis for making any recommendations regarding liability.

## PIPELINE INSPECTOR STAFF

Mr. **WOLF**. Last year we had a discussion about three pipeline inspector positions which were not included in your budget, and which you were subsequently directed by the fiscal year 1994 conference committee to fill. We also had a discussion about the review of pipeline operators' emergency response plans.

What is the status of the three pipeline inspectors which were the subject of the debate last year? Have those positions been filled? If not, why not?

[The information follows:]

OPS issued vacancy announcements for all three positions earlier this year but did not receive submissions from suitable candidates. OPS is currently readvertising the three positions and expects to fill them in fiscal year 1994.

## STATUS OF OPA PLANS

Mr. **WOLF**. What is the status of the review operators for the emergency response plans? Last year you indicated that you intended to carry out this review primarily with contractual support. How is that being handled? If you are primarily contracting out this responsibility, how is the work being monitored by RSPA?

[The information follows:]

The review of the oil spill response plans mandated by the Oil Pollution Act of 1990 (OPA) is proceeding on schedule. RSPA has confirmed that all operators submitting plans have acceptable certification of adequate spill response resources. We have checked all plans to confirm minimum completeness in accordance with the Interim Final Rule. Operators responded to deficiencies noted during the completeness check.

We are now performing the more substantive compliance review to determine if a plan indicates an adequate level of spill preparedness. To be approved, a plan must meet regulation-based review protocols developed by RSPA in cooperation with other Federal and state agencies having plan review authority.

RSPA is on schedule to transmit the results of the compliance review by the end of fiscal year 1994 thereby leaving several months for operators to correct any planning deficiencies by the February 18, 1995 statutory deadline. As reviews are completed, the results will be provided to operators so that they can respond to any planning deficiencies.

RSPA utilizes the contractor to assess functional aspects of emergency response planning and environmental risk analysis in each plan. The contractor is comparing the operators' facility response plans with the Area Contingency Plans, as required by statute. The contractor facilities information exchange between the States, Federal agencies, and the industry and collects data from other agencies regarding their views on planning requirements in specific areas.

RSPA monitors the contractor in accordance with the Federal Acquisition Regulations. RSPA's Office of Contracts and the Contracting Officer's Representative have provided supervision through clear technical director and detailed contract monitoring. We regularly coordinate all matters affecting the work to be performed under the contract through weekly meetings and concise written technical direction. Monitoring includes frequent periodic inspections of work completed to ensure its accuracy, verification of the contractor's invoices for payment each month, and completion of quarterly program review meetings for senior management.

### DISCLOSURE OF FOIA END USERS

Mr. WOLF. In last year's hearing we had a discussion about the potential loss of research and technology offshore due to requests made under the Freedom of Information Act. You indicated that RSPA handled 400 FOIA requests in 1991, and that the majority of those requests came from law firms and consultants and that the client and/or use of the information was not identified. Such disclosure is not currently required under the law.

In response to my question, RSPA further testified for the record that neither Japan nor Germany have FOIA laws, which would suggest that information is much harder to come by in those countries, especially when it comes to foreign requests.

I am very concerned about so-called "friendly espionage" and I have contemplated legislation to change FOIA.

What would be wrong with requiring such disclosure of the end use or end user of the information requested under FOIA?

[The information follows:]

The Clinton administration favors broad disclosure of information under FOIA, but withholds certain information if its release would be harmful to the government or to the party from which it was obtained. Any additional conditions or qualifications that would be required of a requestor, such as identifying the end-use or end-user of the requested information, would run contrary to the policy. As a practical matter, legislation requiring the disclosure of the end-use or end-user of information requested under FOIA may not have the desired results. Those individuals or companies intent on maintaining their anonymity need merely create "straw-men" to act as requestors, thereby frustrating the goal of the legislation.

### PROHIBITING FOIA TO FOREIGN REQUESTORS

Mr. WOLF. And further, with that disclosure in hand, what would be wrong with prohibiting the release of information under FOIA to foreign requesters?

[The information follows:]

As already stated, the Clinton administration favors broad disclosure of information under FOIA. Withholding requires a showing of foreseeable harm to the government or to the party which submitted the information to the government. In addition to this policy consideration, in practice, such a provision may be ineffective. A foreign requestor need only find a willing American host to request the desired information. Once that information is released, it is in the public domain and available to anyone.

### HAZMAT—NAS STUDY

Mr. WOLF. In your budget justifications, you indicate the National Academy of Sciences study on the feasibility of a centralized hazardous materials reporting system and computerized monitoring of hazardous materials shipments will be submitted to Congress. When will this study be completed?

[The information follows:]

The study was completed on April 29, 1993, when the National Academy of Sciences (NAS) transmitted its report, "Hazardous Materials Shipment Information for Emergency Response", to Congress and the Department. On February 15, 1994, the Department submitted its report to Congress, "Improvements to Hazardous Materials Identification Systems," which addresses recommendations made by NAS in its report, and presents the results of the Department's rulemaking proceeding on improving the hazardous materials identification system. The Department noted that FHWA will explore additional technology which could improve hazard communication for emergency responders.

Mr. WOLF. What technology will this involve, and will the tracking of HAZMAT shipments be tied into the Global Position System (GPS)?

[The information follows:]

Technology that may have hazardous materials transportation applications includes electronic data interchange (EDI), automatic electronic identification (AEI) of vehicles, containers, or packages, and shipment-tracking systems including the Global Positioning System.

## CLOSING REMARKS

Mr. COLEMAN. Let me thank you for your testimony today. I appreciate your candor and your appearance here.

Ms. GUTIÉRREZ. Thank you.

Mr. COLEMAN. The hearing stands adjourned.

[The justifications follow:]

U.S. Department of
Transportation

# BUDGET ESTIMATES

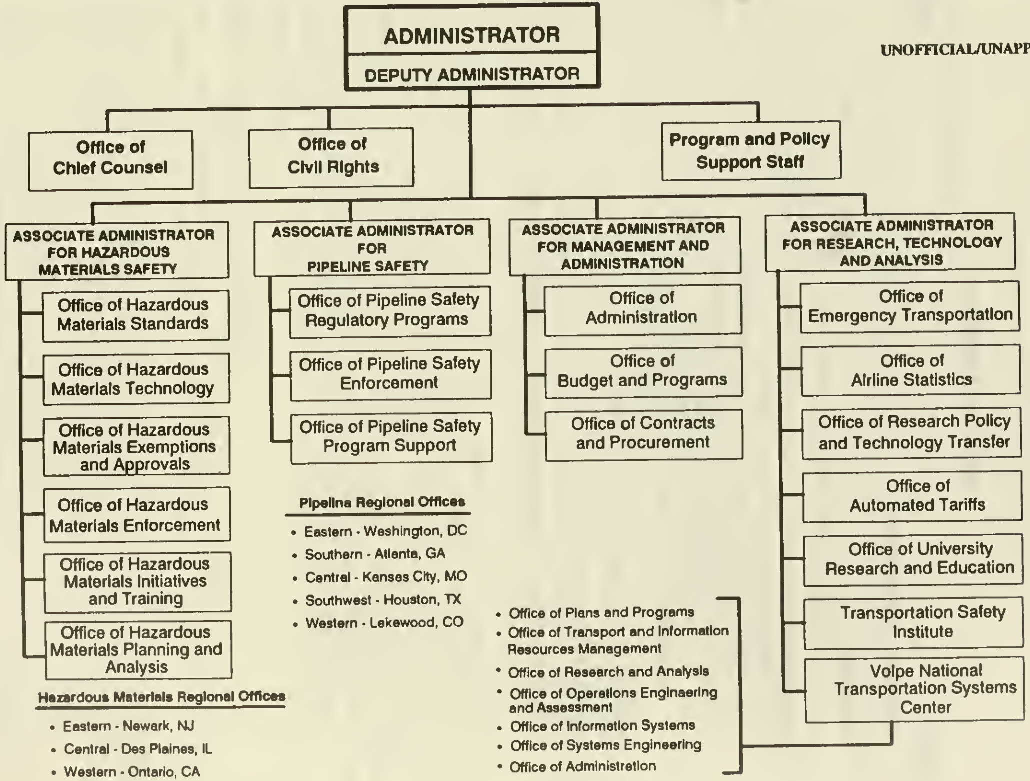
## FISCAL YEAR 1995

## RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION

SUBMITTED FOR USE OF
THE COMMITTEES ON APPROPRIATIONS

# RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION

UNOFFICIAL/UNAPPROVED


ADMINISTRATOR
DEPUTY ADMINISTRATOR
Office of Chief Counsel
Office of Civil Rights
Program and Policy Support Staff
ASSOCIATE ADMINISTRATOR FOR HAZARDOUS MATERIALS SAFETY
Office of Hazardous Materials Standards
Office of Hazardous Materials Technology
Office of Hazardous Materials Exemptions and Approvals
Office of Hazardous Materials Enforcement
Office of Hazardous Materials Initiatives and Training
Office of Hazardous Materials Planning and Analysis
Hazardous Materials Regional Offices
• Eastern - Newark, NJ
• Central - Des Plaines, IL
• Western - Ontario, CA
ASSOCIATE ADMINISTRATOR FOR PIPELINE SAFETY
Office of Pipeline Safety Regulatory Programs
Office of Pipeline Safety Enforcement
Office of Pipeline Safety Program Support
Pipeline Regional Offices
• Eastern - Washington, DC
• Southern - Atlanta, GA
• Central - Kansas City, MO
• Southwest - Houston, TX
• Western - Lakewood, CO
ASSOCIATE ADMINISTRATOR FOR MANAGEMENT AND ADMINISTRATION
Office of Administration
Office of Budget and Programs
Office of Contracts and Procurement
ASSOCIATE ADMINISTRATOR FOR RESEARCH, TECHNOLOGY AND ANALYSIS
Office of Emergency Transportation
Office of Airline Statistics
Office of Research Policy and Technology Transfer
Office of Automated Tariffs
Office of University Research and Education
Transportation Safety Institute
Volpe National Transportation Systems Center
• Office of Plans and Programs
• Office of Transport and Information Resources Management
• Office of Research and Analysis
• Office of Operations Engineering and Assessment
• Office of Information Systems
• Office of Systems Engineering
• Office of Administration

# U. S. DEPARTMENT OF TRANSPORTATION
# RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION
# FY 1995 BUDGET SUBMISSION

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# RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION

## FY 1995 BUDGET SUBMISSION
## TO THE
## COMMITTEES ON APPROPRIATIONS

### GENERAL STATEMENT

The Research and Special Programs Administration (RSPA) presents a budget request of $60 million for FY 1995, an increase in overall budget authority of $5.2 million over the FY 1994 enacted level. RSPA has given considerable attention to the priorities of the Administration and Congress and has targeted specific programs for emphasis. These include an accelerated focus on environmental protection and programs to revitalize the economy through defense conversion efforts and technology enhancement. At the same time, RSPA has taken seriously the President's request to carefully review all programs to ensure they are effective and necessary. Based upon the results of RSPA's review, we are recommending elimination of one program and a significant downsizing of another. Legislation will be introduced supporting both proposals.

This budget reflects RSPA's various emphases and its ability to deliver critical transportation safety and research programs. Still, RSPA's total FY 1995 budget authority request is less than two tenths of one percent of the Department's total budget request, and is offset 55 percent by user fee collections.

The budget addresses several RSPA priorities. Foremost is the request for $21.2 million for pipeline safety which builds on the Administration's emphasis on safety and environmental protection from oil and natural gas in transit. Of this amount, $8 million is for pipeline grants to the States. Also important are the following increases to support two programs of interest to the Administration: $.7 million to strengthen Departmental management of research and development and $.4 million to improve and modernize Departmental emergency transportation response capabilities.

### RSPA's Achievements in FY 1993

RSPA was involved in several activities during FY 1993 that have helped to shape our program for the future.

**Pipeline Safety:** In FY 1993, RSPA completed an in-depth internal analysis of its pipeline safety program in the wake of pipeline spills which raised concerns about damage to the environment. Most notable of the spills resulted from the rupture of a Colonial Pipeline Company line near Reston, Virginia. As a result, this Administration has directed that the pipeline program reach a balance in its efforts between its historical public safety perspective and its strengthened environmental safety mandate. This is a timely follow up to the Oil Pollution Act of 1990 and the Pipeline Safety Act of 1992 which are two key pieces of environmental protection legislation. The centerpiece of RSPA's redirection, the Pipeline Safety Environmental Program Review, is a wide-ranging initiative which includes 1) accelerated rulemakings, 2) promotion of comprehensive one-call programs, 3) increased liquid pipeline inspections, and 4) other proactive activities designed to increase state participation in pipeline environmental protection activities.

**Research and Technology:** Research and Development efforts in FY 1993 focused largely on planning and preparing for defense conversion activities to transportation applications. A major effort included increased activity in the Department's Navigation Council to assure that the Federal Government's investment in radionavigation systems reaches application in the civil sector.

**Emergency Transportation:** As a result of the Mid-west flood, RSPA's small emergency staff directed a massive Departmental response effort to assist communities and citizens whose transportation systems were affected by these catastrophic events. Through close and constant coordination with DOT Operating Administrations, the Federal Emergency Management Agency, and the many other involved organizations, RSPA was able to accelerate information exchange to government agencies, affected communities and individuals on transportation activities related to flood response.

**Hazardous Materials Transportation:** FY 1993 was the inaugural year for disbursements of emergency preparedness planning and training grant funds, within the Office of Hazardous Materials Safety. These grants are a major step in an effort to assist States, Territories and Indian Tribes in being better prepared to respond to accidents involving hazardous materials.

## RSPA's Plans for FY 1994

In FY 1994, RSPA will continue to implement and strengthen activities begun or accelerated in FY 1993.

**Pipeline Safety:** Pipeline activity will focus on 1) executing action items in the Environmental Program Review, 2) implementing requirements of the Oil Pollution Act (OPA) of 1990, and 3) publishing the Office of Pipeline Safety (OPS) risk-based prioritization plan. OPS will address compliance attention to the estimated 2,000 new low stress pipeline inspection units coming under regulation along with other high risk hazardous liquid pipeline facilities. For the OPA plan review process, OPS will be collecting data from other agencies to identify and prioritize geographical areas of environmental sensitivity.

**Research and Technology:** Research efforts will include activities to produce the FY 1994 Radionavigation Plan and development of recommendations to promote joint management of the

Global Positioning System between DOD and DOT. Increased outreach efforts with DOD and the transportation industry will strengthen DOT ties for defense conversion projects.

**Hazardous Materials Transportation:** Distribution of emergency response grant funds will continue in the hazardous materials program in FY 1994. In addition, final recommendations will be submitted to Congress on provisions of the National Academy of Sciences study on the feasibility of a centralized hazardous materials reporting system and computerized monitoring of hazardous materials shipments.

## RSPA's FY 1995 Agenda

Following a review of the effectiveness of RSPA programs, one has been identified for downsizing and one for elimination. RSPA intends to restructure and downsize its Office of Automated Tariffs and abolish program activities supporting sanitary food safety (Sanitary Food Transportation Act of 1990). Both proposals are reflected in the FY 1995 budget request. In addition to the decreases, we are requesting modest increases for Pipeline Safety grants, research planning and monitoring, and emergency preparedness activities.

**Program Reductions:** Two DOT/RSPA review teams analyzing the airline tariff filing program concluded that current operations were inefficient and a major downsizing of the office was possible without sacrificing the programs's primary mission - the review and approval of international tariff rate changes. Using current technology and maximizing automation to the greatest extent possible, the program will operate with one program manager (from a current total of 12 staff) augmented by contract support. We propose to implement this program change over a two year period, beginning in FY 1995.

In addition, we are recommending the elimination of all program activities associated with the Sanitary Food Transportation Act of 1990. We believe the program can be abolished in the Department of Transportation based upon the lack of records or other evidence documenting the incidence of food transported by contaminated carriers. Further, implementing the Act duplicates the Department of Health and Human Services expertise in this area. Before the 1990 Act, RSPA had never regulated the safe transportation of food.

**Pipeline Safety:** RSPA is requesting a $1.8 million increase in the pipeline safety program (including grants) for FY 1995. The requested funds will enhance the public and environmental safety aspects of the pipeline safety program.

Of this increase, $.5 million is for State pipeline safety grants authorized under the Natural Gas Pipeline Safety Act and Hazardous Liquid Pipeline Safety Act. These Acts allow the Federal Government to reimburse up to 50% of the costs incurred by State pipeline safety programs. Appropriated amounts for these grants have never been sufficient to reimburse the States the full 50%. Many States have difficulty implementing a complete program due to lack of the full Federal contribution. In exchange for this incentive of increased funding to States, RSPA is stressing and expecting States to improve program performance through adoption of federal regulations and to take over safety jurisdiction of intrastate pipelines.

Funds are also requested for 1) hiring three FTP/FTE for inspectors as part of RSPA's new responsibility to oversee low-stress hazardous liquid pipelines, 2) automating risk-related information systems and developing a risk-related data base, and 3) contracting for witnessing of remedial tests required as part of compliance actions, such as hazardous facility orders and new construction inspections. As we move to increase our inspection efforts, these resources become critical.

**Management of Transportation Research and Development:** An increase of $.7 million is requested to be directed to defense conversion, outreach, coordination, and intermodal studies. To further the Administration's commitment that technology be a key to this country's economic growth, the Department must be a leader in tapping the defense industry's wealth of research and technology transfer potential, and solutions to transportation problems. RSPA will examine the most promising commercial applications of current military projects, analyze the barriers to cooperative R&D, and assess the role of universities, laboratories, etc. in these efforts. In support of the President's technology policy, coordination efforts will be expanded to ensure that the Department's R&D is focused on the highest priority and most productive areas as identified by the President, that research results are easily transferred to ultimate users, and that outreach activities will be increased and data-gathering and sharing with key components of the transportation industry become an integral part of our work.

**Emergency Preparedness Grant Program:** We are proposing a limitation on the amounts available in FY 1995 for emergency preparedness grant and support activities. A total of $11.75 million is requested for obligation from the amounts made available for planning and training grants, state monitoring, administration and curriculum development.

**Emergency Transportation:** Disasters have increased over the past decade, with the most costly natural disasters in American history in the last two years alone. The Los Angeles earthquake of January 1994, the Mid-west flood of 1993, Hurricane Andrew and other disasters brought to a standstill nearly every transportation system in the affected areas. RSPA is the

Secretary of Transportation's crises coordinator and, as such, is responsible for the management of multi-modal transportation crises activities. In performing this job, emergency coordination has been made especially difficult due to the dated capability of the equipment in the main Crisis Management Center (CMC) located in the DOT Headquarters Building. To ensure an aggressive emergency response capability, we are requesting an increase of $.4 million to upgrade the voice communications and information systems of the CMC. Included in this upgrade will be an evaluation of ways to better integrate into the CMC the communication capabilities of the United States Coast Guard and the Federal Aviation Administration. The upgrade will provide better and faster access to critical information on the status of transportation systems and relief requirements, thereby improving decision making by the Secretary and crisis managers charged with serving the needs of those touched by the emergency.

**Program and Administrative Support:** Program Support finances common administrative services centrally funded through the Office of the Secretary's (OST) Working Capital Fund (WCF). Each Operating Administration is charged services based on a usage formula. RSPA's estimated charges from the WCF for fiscal years 1994 and 1995 are $2.9 million and $3.1 million, respectively.

## Summary

RSPA has been mindful during the preparation of this budget to respond to the clear priorities of the Administration and Congress, and to build a budget which reflects the Administration's policies, yet recognizes the restraint and limitation of the government's role envisioned by the President. Although our funding levels make RSPA one of the smallest agencies in DOT, we are nonetheless proposing to downsize and eliminate two of four DOT programs identified by the Secretary for reduction. We are requesting modest increases only in high priority areas affecting safety issues, technology or the environment. We believe our requests are modest yet vital to the continued success of those priority programs. We have made difficult decisions in other programs to demonstrate our commitment for these priorities. We believe this budget will provide us with the resources necessary to support our programs and their missions.

## DEPARTMENT OF TRANSPORTATION
## RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION
## SUMMARY OF POSITIONS AND BUDGET AUTHORITY (BA)

| | FY 1993 Enacted | FY 1994 Actual | FY 1995 Request |
|---|---|---|---|
| BUDGET AUTHORITY ($000) | | | |
| Research and Special Programs | 23,504 | 24,008 | 26,982 |
| Emergency Preparedness Grants | 11,000 | 11,400 | 11,750 |
| Pipeline Safety | 15,050 | 16,927 | 18,539 |
| Trust Fund Share of Pipeline Safety | -- | 2,449 | 2,685 |
| Alaska Pipeline Task Force | 550 | | |
| Totals, Budget Authority | 50,104 | 54,784 | 59,956 |
| OBLIGATIONS ($000) | | | |
| Research and Special Programs | 22,307 | 25,691 | 26,982 |
| Emergency Preparedness Grants | 10,442 | 11,450 | 11,750 |
| Pipeline Safety | 14,905 | 17,474 | 18,539 |
| Trust Fund Share of Pipeline Safety | -- | 2,449 | 2,685 |
| Alaska Pipeline Task Force | 3 | 547 | 0 |
| Volpe National Transportation Systems Center | 225,263 | 228,000 | 238,000 |
| Totals, Obligations | 272,920 | 285,611 | 297,956 |
| OUTLAYS ($000) | | | |
| Research and Special Programs | 25,526 | 19,574 | 22,070 |
| Emergency Preparedness Grants | 638 | 11,939 | 12,622 |
| Pipeline Safety | 13,569 | 15,306 | 17,050 |
| Trust Fund Share of Pipeline Safety | -- | 2,449 | 2,685 |
| Alaska Pipeline Task Force | 3 | 438 | 109 |
| Volpe National Transportation Systems Center | (4,833) | 0 | 0 |
| Totals, Outlays | 34,903 | 49,706 | 54,536 |
| POSITIONS (FTP) | | | |
| Direct: | | | |
| Research and Special Programs | 215 | 216 | 205 |
| Pipeline Safety | 72 | 72 | 75 |
| Allocations/Reimbursements: | | | |
| Volpe National Transportation Systems Center | 515 | 515 | 515 |
| Transportation Safety Institute | -- | -- | 37 |
| Totals, Positions | 802 | 803 | 832 |

## SUMMARY (cont.)

| | FY 1993 Enacted | FY 1994 Actual | FY 1995 Request |
|---|---|---|---|
| WORKYEARS (FTE) | | | |
| Research and Special Programs | 218 | 217 | 207 |
| Pipeline Safety | 60 | 72 | 75 |
| Allocations/Reimbursements: | | | |
| Volpe National Transportation Systems Center | 597 | 576 | 576 |
| Transportation Safety Institute | -- | -- | 37 |
| Total, All FTE | 875 | 865 | 895 |
| RSPA RECEIPTS ($000) | | | |
| Pipeline Safety Fund | 14,602 | 17,683 | 19,343 |
| Emergency Preparedness Fund | 9,550 | 15,000 | 15,000 |
| HazMat Registration Program | 0 | 3,000 | 3,000 |
| Total, General Offsetting Receipts | 24,152 | 35,683 | 37,343 |
| OTHER FEES ($000) | | | |
| Electronic Tariff Filing Fees Credited to RSP Account in Appropriations Language | 1,000 | 1,000 | 1,000 |

## DEPARTMENT OF TRANSPORTATION

## RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION

*Federal Funds*

General and Special Funds:

### RESEARCH AND SPECIAL PROGRAMS

### [HAZARDOUS MATERIALS SAFETY]

For expenses necessary to discharge the functions of [Hazardous Materials Safety and for conducting research and development, $12,600,000,] *the Research and Special Programs Administration, $26,982,000, of which $185,000 shall be derived from the Pipeline Safety Fund, and* of which [$1,364,000] *$2,810,000* shall remain available until expended: *Provided*, that up to [$1,000,000] *$1,050,000* in fees collected under section 106(c)(11) of the Hazardous Materials Transportation Act (49 U.S.C. App. 1805(c)(11)) shall be deposited in the general fund of the Treasury as offsetting receipts: [*Provided*, that there may be credited to this appropriation funds received from States, counties, municipalities, other public authorities, and private sources for expenses incurred for training, and for reports publication and dissemination.]

### [AVIATION INFORMATION MANAGEMENT]

[For expenses necessary to discharge the functions of Aviation Information Management, $2,521,000] *Provided further*, That there may be credited to this appropriation funds received from States, counties, municipalities, other public authorities, and private sources for expenses incurred for training, for reports publication and dissemination, and for aviation information management: *Provided further*, That, notwithstanding any other provision of law, there may be credited to this appropriation up to $1,000,000 in funds received from user fees established to support the electronic tariff filing system: *Provided further*, That there may be credited to this appropriation funds received from user fees established to defray the costs of obtaining, preparing, and publishing in automatic data processing tape format the United States International Air Travel Statistics data base published by the Department.

### [Emergency Transportation]

[For expenses necessary to discharge the functions of Emergency Transportation and for expenses for conducting research and development, $842,000: *Provided*, That there may be credited to this appropriation funds received from States, counties, municipalities, other public authorities, and private sources for expenses incurred for training, and for reports publication and dissemination.]

### [Research and Technology]

[For expenses necessary to discharge the functions of Research and Technology and for expenses for conducting research and development, $1,766,000, of which $585,000 shall remain available until expended: *Provided*, That there may be credited to this appropriation funds received from States, counties municipalities, other public authorities, and private sources for expenses incurred for training, and for reports publication and dissemination.]

### [Program and Administration Support]

[For expenses necessary to discharge the functions of Program and Administrative Support, $6,279,000, of which $185,000 shall be derived from the Pipeline Safety Fund: *Provided*, That there may be credited to this appropriation funds received from States, counties municipalities, other public authorities, and private sources for expenses incurred for training, and for reports publication and dissemination: *Provided further*, That no employees other than those compensated under this appropriation shall serve in the Office of the Administrator, the Office of Policy and Programs, the Office of Civil Rights, the Office of Management and Administration, and the Office of the Chief Counsel.] *(Department of Transportation and Related Agencies Appropriations Act, 1994)*.

## DEPARTMENT OF TRANSPORTATION
## RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION
## RESEARCH AND SPECIAL PROGRAMS

### PROGRAM AND FINANCING (in thousands of dollars)

Identification code 69-0104-0-1-407

| | | FY 1993 ACTUAL | FY 1994 ENACTED | FY 1995 REQUEST |
|---|---|---|---|---|
| | Program by activities: | | | |
| | Direct program: | | | |
| 00.01 | Hazardous materials safety............. | 11,497 | 14,283 | 12,999 |
| 00.02 | Airline statistics..................... | 2,553 | 2,521 | 2,454 |
| 00.03 | Emergency transportation............... | 859 | 842 | 1,327 |
| 00.04 | Research and technology................ | 1,512 | 1,766 | 2,801 |
| 00.05 | Program support........................ | 5,886 | 6,279 | 7,401 |
| 00.91 | Total direct program................. | 22,307 | 25,691 | 26,982 |
| 01.01 | Reimbursable program................... | 16,888 | 29,000 | 37,104 |
| 10.00 | Total obligations.................... | 39,195 | 54,691 | 64,086 |
| | Financing: | | | |
| 21.40 | Unobligated balance available, start of year.......................... | (769) | (1,683) | |
| 24.40 | Unobligated balance available, end of year............................ | 1,683 | | |
| 25.00 | Unobligated balance expiring........... | 283 | | |
| 39.00 | Budget authority (gross)............. | 40,392 | 53,008 | 64,086 |
| | Budget authority: | | | |
| | Current: | | | |
| 40.00 | Appropriation.......................... | 23,329 | 23,828 | 26,797 |
| 40.20 | Appropriation (special fund)........... | 175 | 180 | 185 |
| 43.00 | Appropriation (total)............... | 23,504 | 24,008 | 26,982 |
| 68.00 | Spending authority from offsetting collections ............ | 16,888 | 29,000 | 37,104 |
| | Relation of obligations to outlays: | | | |
| 71.00 | Total obligations...................... | 39,195 | 54,691 | 64,086 |
| 72.40 | Obligated balance, start of year....... | 6,883 | 2,618 | 8,735 |
| 74.40 | Obligated balance, end of year......... | (2,618) | (8,735) | (13,647) |
| 77.00 | Adjustments in expired accounts........ | (1,046) | | |
| 87.00 | Outlays (gross)...................... | 42,414 | 48,574 | 59,174 |
| | Adjustment to budget authority and outlays: | | | |
| | Deductions for offsetting collections: | | | |
| 88.00 | Federal funds.......................... | (16,888) | (29,000) | (37,104) |
| 89.00 | Budget authority (net)................. | 23,504 | 24,008 | 26,982 |
| 90.00 | Outlays ............................... | 25,526 | 19,574 | 22,070 |

## DEPARTMENT OF TRANSPORTATION
## RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION
## RESEARCH AND SPECIAL PROGRAMS

### OBJECT CLASSIFICATION (in thousands of dollars)

Identification code 69-0104-0-1-407

**Direct Obligations:**

| | | FY 1993 ACTUAL | FY 1994 ENACTED | FY 1995 REQUEST |
|---|---|---|---|---|
| | Personnel Compensation: | | | |
| 11.1 | Full-time permanent | 10,051 | 10,964 | 11,401 |
| 11.3 | Other than full-time permanent | 554 | 610 | 619 |
| 11.5 | Other personnel compensation | 341 | 40 | 30 |
| 11.9 | Total personnel compensation | 10,946 | 11,614 | 12,050 |
| 12.1 | Civilian personnel benefits | 2,156 | 2,904 | 2,966 |
| 21.0 | Travel and transportation of persons | 566 | 507 | 484 |
| 22.0 | Transportation of things | 26 | 50 | 50 |
| 23.3 | Communications, utilities, and miscellaneous charges | 513 | 391 | 284 |
| 24.0 | Printing and reproduction | 174 | 335 | 322 |
| 25.2 | Other services | 7,414 | 9,529 | 10,439 |
| 26.0 | Supplies and materials | 107 | 146 | 138 |
| 31.0 | Equipment | 405 | 215 | 249 |
| 99.0 | Subtotal, direct obligations | 22,307 | 25,691 | 26,982 |

Continued next page...

**Reimbursable Obligations:**

| | | | | |
|---|---|---|---|---|
| | Personnel Compensation: | | | |
| 11.1 | Full-time permanent............ | | | 2,321 |
| 11.3 | Other than full-time permanent..................... | | | 116 |
| 11.5 | Other personnel compensation... | | | 50 |
| 11.9 | Total personnel compensation................ | | | ------<br>2,487 |
| 12.1 | Civilian personnel benefits.... | | | 529 |
| 21.0 | Travel and transportation of persons.................... | | | 1,746 |
| 22.0 | Transportation of things....... | | | 22 |
| 23.3 | Communications, utilities, and miscellaneous charges..... | | | 427 |
| 24.0 | Printing and reproduction...... | | | 380 |
| 25.2 | Other services................. | 16,888 | 29,000 | 31,081 |
| 26.0 | Supplies and materials......... | | | 302 |
| 31.0 | Equipment...................... | | | 130 |
| 99.0 | Subtotal, reimbursable obligations.... | ------<br>16,888 | ------<br>29,000 | ------<br>37,104 |
| | | ------ | ------ | ------ |
| 99.9 | Total obligations............ | 39,195 | 54,691 | 64,086 |

**PERSONNEL SUMMARY**

| | | | |
|---|---|---|---|
| Direct Civilian: | | | |
| Full Time Equivalent Employment | 218 | 217 | 207 |
| Full Time Equivalent of Overtime and Holiday Hours (Non-Add) | 1 | 1 | 1 |
| Reimbursable Civilian: | | | |
| Full Time Equivalent Employment | -- | -- | 37 |
| | ---- | ---- | ---- |
| Total FTE | 218 | 217 | 244 |

## RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION

### Summary of Requirements - Budget Authority

### RESEARCH AND SPECIAL PROGRAMS - SUMMARY

| | FY 1994 Estimate | FY 1995 Request |
|---|---|---|
| Full Time Permanent (FTP) Positions | 216 | 205 |
| Full Time Equivalent (FTE) Workyears | 217 | 207 |
| ($000) | | |
| Personnel Compensation and Benefits | 14,048 | 14,608 |
| Operating Expenses | 3,201 | 3,754 |
| Program Activities | 3,895 | 4,730 |
| Registration Program | 1,000 | 1,050 |
| Research and Development | 1,864 | 2,840 |
| | 24,008 | 26,982 |

## APPROPRIATION SUMMARY
## RESEARCH AND SPECIAL PROGRAMS
## EXPLANATION OF ADMINISTRATIVE EXPENSES
## (in thousands of dollars)

**Total Personnel Compensation** $14,608 +560

Based on an analysis of FY 1994 pay data, we have utilized a refined pay model to accurately project our needs for FY 1995.

FY 1995 Raise +210

The requested increase is to fund a 1.6 percent pay raise beginning in January, 1995.

Locality Pay +162

The requested increase is to annualize the locality pay authorized in FY 1994.

Within-Grade Increases +361

The requested increase includes costs associated with mandatory increases required for those employees who have met the required criteria.

Program Eliminations/Reductions -173

The decrease represents the net amount from staff reduction savings and termination costs for the SFTA Program elimination and the Automated Tariffs Program reduction.

**Operating Expenses** $3,754 +553

This request for operating expenses includes a reduction of $46 thousand, which reflects an effort to reduce administrative costs where practical.

Travel and Transportation $482 -10

The request includes increases for inflation along with reductions which reflect an effort to reduce administrative costs where practical.

Working Capital Fund (WCF) $2,105 +460

Our request reflects the Office of the Secretary's WCF budget estimate for FY 1995.

Communications, Utilities & Miscellaneous $322 -69

The request includes reductions for costs associated with communications, utilities, and miscellaneous charges not covered under the working capital fund. These charges include: local phone charges; long-distance phone calls made under C&P or AT&T; workers compensation; etc.

Printing $270 0

Printing costs are held to the FY 1994 enacted level.

Training $74 2

The request includes a slight increase to reflect training needs.

Accounting $138 +138

The request represents RSP's prorated cost of RSPA accounting services contracted through the FAA. The total RSPA cost for Accounting services is $189 thousand, which is a $10 thousand decrease from FY 1994. Funding for this activity appeared as a contract program in FY 1994.

Supplies & Materials $138 -8

The request includes reductions which reflect an effort to reduce administrative costs where practical.

Equipment $225 +40

The request includes increases for the cost of systems furniture and the replacement of equipment to maintain office productivity.

## RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION

### Summary of Requirements - Budget Authority

### RESEARCH AND SPECIAL PROGRAMS
### Element: Hazardous Materials Safety

| | FY 1994 Enacted | FY 1995 Request |
|---|---|---|
| Full Time Permanent (FTP) Positions | 116 | 111 |
| Full Time Equivalent (FTE) Workyears | 111 | 107 |
| ($000) | | |
| Personnel Compensation and Benefits (PC&B) | 6,506 | 6,725 |
| Operating Expenses | 725 | 714 |
| Total Contract Programs | 3,005 | 3,110 |
| Breakdown of programs: | | |
| Information Systems | 950 | 1,000 |
| Research and Analysis | 300 | 300 |
| Inspection and Enforcement | 220 | 230 |
| Rulemaking Support | 550 | 550 |
| Hazmat Training | 350 | 350 |
| Information Dissemination | 170 | 170 |
| Emergency Preparedness | 250 | 370 |
| Sanitary Food Safety | 75 | 0 |
| International Standards | 140 | 140 |
| Registration Program | 1,000 | 1,050 |
| Research and Development | 1,364 | 1,400 |
| | 12,600 | 12,999 |
| Additional funds allocated from the Program Support activity for communications, utilities, WCF and misc. costs: | 1,078 | 1,314 |
| | 13,678 | 14,313 |
| HMTUSA Emergency Preparedness Grants Administrative Expenses* (Includes PC&B and Administrative Costs) | 500 | 600 |

* Offsetting collections finance this activity.

## HAZARDOUS MATERIALS SAFETY

## FY 1995 BUDGET REQUEST

### MISSION

Hazardous Materials Safety (HMS) administers a comprehensive nationwide safety program to protect the Nation from the risks to life, health, property, and the environment inherent in the transportation of hazardous materials by water, air, highway, and railroad, to protect the environment from damage by oil and other pollutants, and to ensure the safe transportation of food.

HMS plans, implements, and manages hazardous materials (HM), pollution control (PC) and food safety (FS) transportation programs in the following functional areas:

**Information Systems** -- Maintains and operates automated data systems in support of all program activities.

**Research and Analysis** -- Analyzes, monitors, and integrates HM, PC, and FS transportation issues requiring high level policy surveillance; develops regulatory actions and analyzes costs, benefits, and other impacts associated with current and planned rulemaking projects; develops countermeasures for safety problems; and evaluates factors impacting current and proposed regulations.

**Inspection and Enforcement** -- Plans and manages a national program of safety inspection and enforcement to determine compliance with the Hazardous Materials Regulations (HMR); establishes and maintains cooperative relationships with State and local governments, other modal administrations, and industry concerning inspection and enforcement matters; and provides comments or feedback concerning enforceability of proposed or existing regulations.

**Rulemaking Support** -- Promulgates and maintains HM, PC, and FS transportation safety standards; participates in the development of international safety standards; and maintains a system for providing regulatory relief through exemptions and approvals.

**Hazmat Training** -- Provides formal training and internships and develops educational materials using various media to enhance compliance.

**Information Dissemination** -- Disseminates educational materials and descriptive literature concerning specific requirements of the HMR to enhance compliance.

**Emergency Preparedness** -- Provides emergency response support and information to mitigate the consequences of HM incidents.

**Sanitary Food Safety** -- Implements the Sanitary Food Transportation Act (SFTA) of 1990 to safeguard the public health and environment by regulating the safe transportation of food and other consumer products.

**Registration Program** -- Registers and maintains a database of certain shippers and carriers of HM and collects fees to support emergency preparedness programs and activities.

**International Standards** -- Represents the United States in the development of international standards for HM transportation to protect the public, environment, and economic interests.

**Emergency Preparedness Grants** -- Implements a national grant and technical assistance program to increase public capability to plan for and respond to HM incidents.

Hazardous Materials Safety transfers funds from the Emergency Preparedness Grants appropriation to offset Personnel Compensation and Benefits and operating expenses necessary to conduct the Emergency Preparedness Grants program. The costs allowed to be transferred for this activity are as follows:

| FY 1993<br>Enacted | FY 1994<br>Enacted | FY 1995<br>Request |
|---|---|---|
| 500 | 500 | 600 |

Accordingly, these funds are not included in the HMS appropriation request, but are counted in the Emergency Preparedness Grants Appropriation.

## POSITIONS

Five positions under the Food Safety Program have been eliminated.

New: 0

## PROGRAM: INFORMATION SYSTEMS

**ACTIVITY (in thousands):** Hazardous Materials Information Systems

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 1,000 | 950 | 1,000 | +50 |

**PROBLEM STATEMENT:**

The Secretary of Transportation is required by the Hazardous Materials Transportation Act (HMTA) to establish and maintain a central reporting system and data center to provide technical and other information to Federal, State, and local government agencies that respond to HM transportation emergencies. The Secretary is also required to submit an annual report to Congress on HM transportation including a thorough statistical compilation of accidents and casualties as well as a list of exemptions in effect and their basis. HMS information is collected and maintained on the Hazardous Materials Information System (HMIS).

HMS uses HMIS data to support its mission activities, develop regulations; issue exemptions, approvals, and interpretations; oversee radioactive material routing; and enforce safety regulations. This function is even more critical as the Department of Transportation (DOT) monitors the transition to performance based packaging brought about under HM-181.

Amendments to the HMTA expanded the scope of HMIS by requiring the Department to collect information not previously available, including intrastate highway incident reports and certain other information on carriers and shippers of HM.

**ACCOMPLISHMENTS:**

As recommended by the General Accounting Office (GAO), HMS implemented a policy of correlating HMIS reports with the RSPA telephonic database and the Federal Railroad Administration's written reports to ensure compliance with reporting requirements. The Volpe National Transportation Systems Center (VNTSC) completed a pilot study of the possible benefits of correlating HMIS data with incident data collected by State agencies using California, New Jersey, and New York as models. Database revisions necessitated by HM-181 have been accomplished.

## WORKLOAD INDICATORS

| | 1992 | 1993 | 1994 * | 1995 * |
|---|---|---|---|---|
| Incident Reports | 9,300 | 12,000 | 24,000 | 24,000 |
| Exemptions Processed | 1,816 | 1,700 | 1,600 | 1,500 |
| Approvals Processed | 8,223 | 11,000 | 16,000 | 20,000 |
| Competent Authorities | 250 | 300 | 500 | 700 |

* Estimated

In July 1992, RSPA published the Final Rule implementing the shipper and carrier registration requirements, and registration data are integrated into the HMIS database. An intermodal inspection and enforcement database was completed in the fourth quarter of FY 1993. In FY 1994, regulations extending the reporting requirements to intrastate transportation of HM will be issued, adding approximately 10,000 incident reports annually to the HMIS data base. These actions will result in a more comprehensive database, as recommended by the Office of Technology Assessment (OTA) and GAO. The intermodal inspection and enforcement database will enable RSPA and the other modes to more easily take prior shipper violations into consideration when recommending penalties.

**PLANNED FOR FY 1995:**

The HMIS is operated by an on-site contractor that provides data entry, system development and maintenance, and data retrieval support. HMS oversees improvements to the system. Contracting out this function is a cost-effective arrangement. The Research and Special Programs Administration (RSPA) will continue to build a more comprehensive HMIS database, as recommended by OTA and GAO, by obtaining information on: shippers and carriers who are required to register and pay a fee to support an emergency preparedness grants program; interstate and intrastate incidents; and prior shipper violations. RSPA will also improve data quality through the use of additional data verification audits in its data entry process. New quality control procedures will be established, making data more reliable. RSPA will continue to improve data retrieval accessibility through modified menu-driven programs. RSPA is requesting $1,000,000 to continue the operation of the system.

## PROGRAM: RESEARCH AND ANALYSIS

**ACTIVITY (in thousands):** Regulatory Analysis

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 300 | 300 | 300 | 0 |

**PROBLEM STATEMENT:**

HMS is required to analyze, monitor, and integrate safety issues; develop countermeasures for safety problems; develop regulatory actions and analyze costs, benefits, and other impacts associated with current and planned rulemaking projects; and evaluate factors impacting current and proposed regulations.

Each major rule requires preparation of a regulatory impact analysis and each non-major rule requires a regulatory evaluation. All rulemaking actions must include an analysis of costs and benefits including an estimate of the potential cost savings or other benefits to the economy, in accordance with the President's guidelines, applicable Executive Orders, and DOT regulatory policy. Assessments must also be made to ensure that: the actions are needed; their benefits exceed their costs; and the impact on small businesses and the environment is minimized. Impacts on Federal-State relationships must also be determined. Special studies are occasionally needed to support rulemaking actions and preemption determinations and to evaluate potential safety problems. In addition, there is an increasing call for quantitative profiles of the regulated industry. HM-181, Performance-Oriented Packaging Standards, a complex, controversial rulemaking, required in excess of 15 staff years to complete. The regulatory evaluation alone required a core staff of five and several months to finish.

**ACCOMPLISHMENTS:**

- In 1992, accomplishments included final rules for training, marine pollutants, registration and fee collection, and emergency response planning and training grants.
- In FY 1993, RSPA published an interim final rule to implement provisions of the Oil Pollution Act (OPA), pertaining to oil.
- In FY 1994, RSPA is continuing work on high priority rulemakings including OPA (spill response planning for hazardous substances), intrastate transportation, identification and placarding systems, and harmonizing domestic and international requirements.

**PLANNED FOR FY 1995:**

RSPA staff provide the regulatory, legal, and technical expertise to evaluate rulemaking actions and preemption issues. When the Agency does not have either the specific technical skills or available staff to accomplish specific evaluations or studies, HMS must rely on technical expertise, most often, the staff of VNTSC. Because of the staff expertise, the Volpe Center can produce effective, timely, and technically accurate analyses and studies. RSPA currently has 13 high priority rulemakings in progress, many of which are required by HMTA and OPA. A number of these rulemakings will extend into FY 1995 and beyond, and new issues are certain to arise. Ongoing regulatory activities which will continue into FY 1995 include: adjustments to the standards adopted under HM-181, based on feedback from the regulated industry and international regulatory changes; rail tank car safety issues; identification and communication systems; and revised standards for cylinder manufacture and maintenance. Several of the rulemakings respond to some of the 40 open National Transportation Safety Board recommendations addressed to RSPA.

## PROGRAM: INSPECTION AND ENFORCEMENT

**ACTIVITY (in thousands):** Compliance Support

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 140 | 220 | 230 | +10 |

**PROBLEM STATEMENT:**

The HMS enforcement program has jurisdiction over 7,000 packaging manufacturers and approximately 50,000 shippers. These numbers will increase with the extension of the HMR to intrastate transportation of HM and implementation of the OPA. Approximately 500,000 shipments of HM move in the Nation's commerce every day. It is impossible to inspect each one, but it is essential to encourage and enforce compliance with the HMR.

**ACCOMPLISHMENTS:**

WORKLOAD INDICATORS

| | 1992 | 1993 * | 1994 * | 1995 * |
|---|---|---|---|---|
| Inspector Work Years | 17.5 | 17.5 | 18.0 | 18.0 |
| Inspections | 1,203 | 1,000 | 1,050 | 1,050 |
| Civil Cases | 133 | 175 | 175 | 175 |
| Cases Closed | 72 | 150 | 150 | 150 |
| Penalty Assessments | $300,248 | $700,000 | $700,000 | $700,000 |

* Estimated

In FY 1993 RSPA:

- Reduced the Hazardous Materials Specialist Program from 12 to 8 weeks to increase participation by easing State officials' concerns regarding the participants' absence from their respective jurisdictions.
- Modified the program structure to enhance direct, first-hand enforcement and investigation experience with RSPA regional office personnel.
- Expanded program criteria and aggressively solicited 10 participants from 9 States (2 people from Minnesota) to participate in the Hazardous Materials Specialist Intern Program.
- Completed and distributed 150 copies of "The Compliance Partnership" video series.

- Sponsored the Cooperative Hazardous Materials Enforcement Development (COHMED) program Spring 1993 Conference in Charleston, South Carolina and the Fall 1993 Semi-Annual Conference in Portland, Oregon.

- Contracted for the COHMED Quarterly Newsletter and Bulletin and assisted COHMED in a comprehensive update/revision, printing, and distribution of the COHMED Workbook.

- Maintained the COHMED mailing list of more than 3,000 Federal, State, and local government, industry, and private sector participants.

**PLANNED FOR FY 1995:**

HMS enhances regulatory compliance through a three-part strategy: (1) inspections and enforcement of regulations; (2) coordination of DOT's overall HM enforcement programs; and (3) sponsorship of cooperative programs which provide officials in State and local governments with an appreciation of the need for uniformity in enforcement efforts. These include a variety of individual initiatives:

- Conduct formal hearings. Each respondent in a civil penalty enforcement case has the right to request a formal hearing before an administrative law judge. Funding in the amount of $5,000 is required for hearings.

- The COHMED program, which provides for the exchange of information among the States, local governments, and industry on compliance and enforcement issues, for which $100,000 is requested.

- A Hazardous Materials Specialist Internship program, which sponsors candidates from State and local HM transportation enforcement agencies to participate in an eight-week residency with RSPA, for which $50,000 is requested.

- Continue distribution and loan of the four-part video series, "The Compliance Partnership," which acquaints officials with the benefits of preventing environmental problems through inspection and enforcement programs.

- Update and distribute "The Awareness for Initial Response to Hazardous Materials Incidents" video, which assists States, local agencies, and industry to comply with the HMR training regulations. The video is in great demand and is distributed extensively throughout the United States.

- Contract for part-time secretarial support for each of the four regional offices. There are no clerical positions in these offices. Inspectors must answer the telephone, prepare correspondence, and handle all other administrative matters pertaining to office operations.

Using transportation enforcement specialists for these activities detracts from the primary mission of the regional offices. $75,000 is requested for this program.

## PROGRAM: RULEMAKING SUPPORT

**ACTIVITY (in thousands):** Transportation Safety Standards

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 550 | 550 | 550 | 0 |

**PROBLEM STATEMENT NO. 1:**

To carry out its statutory responsibilities to protect the public from risks from the transportation of HM, HMS is required to determine the need for, develop, promulgate and maintain national safety standards for HM transportation. Regulations cover requirements for classification of HM, hazard communication, packaging, handling, transportation, and incident reporting. Rulemakings are initiated to address safety problems, incorporate new technology, simplify the regulations, delete unnecessarily burdensome requirements, and address new legislation. In compliance with the Administrative Procedure Act and other applicable legislative and executive requirements, the public is given an opportunity to comment on proposed rulemaking actions. This entails publishing all proposed and final actions in the Federal Register, including exemptions, formal interpretations and inconsistency rulings; maintaining a public docket section and, when appropriate, holding public meetings; and annually republishing the applicable parts of the Code of Federal Regulations (CFR).

**PLANNED FOR FY 1995:**

HMS spent approximately $238,500 in FY 1993 for Federal Register printing alone. HMS estimates that it will require $245,000 in FY 1995 to meet its obligations for Federal Register publications. The Federal Register charges $375 per page. These publications are not discretionary. HMS is also requesting $200,000 to fund the annual republication of it's portion of the Code of Federal Regulations, the two volumes comprising Parts 100-180 of Title 49. This also is not a discretionary expenditure.

To enhance opportunities for public participation in rulemakings, HMS is requesting $5,000 to fund four one-day rulemaking hearings, two in the District of Columbia and two elsewhere. The funding would cover room rentals, court reporter fees, and other expenses of such public meetings.

**PROBLEM STATEMENT NO. 2:**

HMS has a continuing need for short-term technical analysis of HM incidents to:

- determine the cause, potential for additional incidents, and appropriate countermeasures;
- document the benefits and costs of alternative regulatory actions, including converting into general regulations exemptions applications and approval requests which have broad application and important safety impacts or significant economic benefits; and
- study new or proposed changes to international transportation safety regulations which may affect industry competitiveness.

**ACCOMPLISHMENTS:**

WORKLOAD INDICATORS

| | 1992 | 1993 | 1994 * | 1995 * |
|---|---|---|---|---|
| Exemptions Processed | 1,816 | 1,700 | 1,600 | 1,500 |
| Approvals Processed | 8,223 | 11,000 | 16,000 | 20,000 |
| Requests for Information | 7,406 | 13,200 | 14,500 | 15,000 |
| Correspondence | 550 | 700 | 800 | 900 |

* Estimated

**PLANNED FOR FY 1995:**

RSPA operates through contractual arrangements with sources of technical expertise such as the National Institutes of Standards and Technology and the Bureau of Mines. HMS ensures RSPA's ability to respond to unanticipated questions on complex technical issues raised by the thousands of requests for exemptions, approvals, and certifications received each year. Many applications involve requests to transport new products or use innovative mechanisms. This program enables industry to remain on the cutting edge of technology and compete internationally using the most advanced techniques available.

At this time, RSPA has approximately 215 pending exemption applications. HMS is requesting $100,000 to continue its use of task order contracts and interagency agreements with organizations with the ability to provide quick-turnaround evaluations and analyses of operational controls, classification criteria, and packaging and performance standards. While specific evaluations and analyses cannot be predicted, as industry requests to transport new products or use innovative advancements, HMS anticipates that in FY 1995 applications will continue to increase.

## PROGRAM: HAZARDOUS MATERIALS TRAINING

**ACTIVITY (in thousands):** Hazardous Materials Training

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 350* | 350 | 350 | 0 |

* Note: This component of $350K was part of the $400K training and Information Dissemination in FY 1993.

**PROBLEM STATEMENT:**

Public safety personnel are the first defense for protecting life, health, property, and the environment. Their inspection and compliance efforts directly contribute to increased safety in the transportation of HM. The availability of cost-effective compliance training and up-to-date educational materials is critical to their ability to perform their safety roles.

**ACCOMPLISHMENTS:**

In FY 1992, we trained 6,173 State and local government personnel at the Transportation Safety Institute (TSI). A similar number will be trained at TSI in FY 1993. In addition, over 1,200 participants were trained at RSPA-sponsored seminars and conferences. All TSI courses were updated to incorporate 1992 regulatory changes (HM-181). Eighty-five percent of in-house training materials were also updated to reflect HM-181 and other regulatory changes, such as hazardous materials employee training requirements, and environmental pollution prevention and response standards. With the addition of pollution control regulations, in addition to continued HM regulation changes, RSPA will continue to develop and/or update training materials to reflect these requirements. An estimated 60,000 persons were trained using the HM transportation training modules supplied by DOT to States for their use and loan. Over 400,000 copies of HM education materials and documents were distributed to the public sector for inclusion in their training documents and for replication and distribution to their employees and students. In FY 1993, additional training modules on cargo tanks and 1992 changes to the HMR were distributed to States for their use and to lend to the public.

**PLANNED FOR FY 1995:**

A total of $350,000 is requested to continue to provide compliance training through TSI. We anticipate that over 6,500 State and local government personnel will be trained in more than 260 classes. RSPA will develop and make greater use of stand-alone training materials and mass communications technology to reach a much wider audience, especially among those smaller jurisdictions that cannot afford formal classroom training for their officials.

## PROGRAM: INFORMATION DISSEMINATION

**ACTIVITY (in thousands):** Information Dissemination

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 170 | 170 | 170 | 0 |

**PROBLEM STATEMENT:**

Public and industry personnel need access to timely and accurate information on requirements for compliance with the HMR, the hazards of certain materials and appropriate procedures to manage emergency situations. Industry also needs to be aware of and participate in the development of proposals affecting the international transportation of HM to sustain the United States' $20 billion dollar chemical trade balance. The need for information will increase substantially with the extension of the HMR to intrastate transportation, new HM employee training requirements, oil pollution response plans, medical waste regulations, and the North American Free Trade Agreement (NAFTA). NAFTA will precipitate an increased need for delivery of training materials and guidance in Spanish.

**ACCOMPLISHMENTS:**

RSPA has had great success in the operation of the Hazardous Materials Information Exchange (HMIX). It is a widely used, cost-effective and up-to-date means of information dissemination.

- In FY 1992, 18,000 users made 40,000 calls to access the bulletin board; and over 22,000 calls were made to the HMIX technical assistance numbers. In the first quarter of FY 1993, users jumped to 26,000, a 44% increase.
- Six new topics were added: Fire/Emergency Medical Service; United States Coast Guard Auxiliary; International Activities Relating to Dangerous Goods; CAMEO (Computer Assisted Management Emergency Organizations); DOE/UETC (Department of Energy/Urban Energy and Transportation Corporation); and the National Task Force.

In 1992, we conducted a seminar on Hazardous Materials by the Highway Mode in conjunction with the Federal Highway Administration (FHWA) and the Commercial Vehicle Safety Alliance (CVSA) and have requests for several more. In conjunction with the Conference on Safe Transportation of Hazardous Articles (COSTHA), we completed a series of three seminars on regulatory improvements. Handout materials for seminar distribution were updated to reflect recent regulatory changes.

In FY 1994, RSPA is adding additional 800 numbers and upgrading the HMIX software. RSPA is continually updating existing publications and developing new materials to reflect significant regulatory changes, particularly HM-181 and HM 126(F). Training courses, technical assistance, training materials and HM information will be provided at all seminars and outreach events.

**PLANNED FOR FY 1995:**

The OTA concluded in 1986 that "a national clearinghouse to make existing information on HM training programs and resources available to States and local personnel both in hard copy and on line, would provide an extremely useful service to emergency response forces." (Transportation of Hazardous Materials, July 1986.) RSPA responded with the creation of the HMIX, a computer bulletin board and information transfer system. A clearinghouse for all types of HM information, including planning, preparedness, training, regulations, enforcement, and emergency response, the system provides two-way communication between users and can be accessed by calling a toll-free number. Many materials that RSPA publishes are made available for electronic downloading through HMIX.

RSPA also produces and distributes more than 700,000 HM information publications annually to industry, the public, and emergency responders. We conduct HM awareness seminars with the assistance of the modal administrations and with the CVSA and the COSTHA. These seminars help Federal, State and local government and industry personnel understand the HMR and their importance in response communication.

RSPA is requesting a total of $80,000 to continue outreach and information dissemination efforts through the HMIX, interagency agreements and by direct contact with the public and private safety and emergency response personnel. On-site training by TSI meets only part of the demand for hazardous materials transportation, compliance, and enforcement training. It is extremely important for RSPA to develop self-study and off-site learning materials and training programs for the multifaceted audience it serves, particularly people who are unable to obtain institutional training. A total of $40,000 is requested to develop and produce an Awareness/Familiarization videotape to enhance compliance with the HMR and to revise and update the modular training series.

We are also requesting $50,000 to develop, for multimedia dissemination, new and revised informational materials which address new or changed training, packaging, hazard communication requirements of the HMR, and oil as a regulated material.

## PROGRAM: EMERGENCY PREPAREDNESS

**ACTIVITY (in thousands):** Emergency Response Support

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 250 | 250 | 370 | +120 |

**PROBLEM STATEMENT:**

The HMTA requires RSPA to establish and maintain a central reporting system and data center to provide the law enforcement and fire fighting personnel, government officers and other interested persons, with technical and other information and advice for meeting emergencies connected with the transportation of HM. RSPA is also required to annually submit to the President a comprehensive report on the transportation of HM, including a statistical compilation of accidents and casualties.

**ACCOMPLISHMENTS:**

The National Response Center (NRC) has supported HMS through the receipt of hundreds of reports of transportation incidents involving HM. Because of extensive efforts to inform the transportation industry of revised reporting requirements, reporting of incidents is expected to increase, as shown in the following table:

WORKLOAD INDICATORS

| | 1992 | 1993 * | 1994 * | 1995 * |
|---|---|---|---|---|
| Incident Reports Submitted to RSPA | 9,300 | 12,000 | 24,000 | 24,000 |

* Estimated

**PLANNED FOR FY 1995:**

HMS has had a reimbursable agreement for 12 years with the Coast Guard's NRC to receive incident reports from carriers. The NRC provides callers with immediate technical advice on responding to incidents through telephone links with the Chemical Transportation Emergency Center, a service of the Chemical Manufacturers Association. The NRC also notifies either an Environmental Protection Agency (EPA) or Coast Guard on-scene coordinator, if warranted. RSPA receives immediate notice of major incidents, such as the closing of a major transportation artery. A permanent record of telephonic reports is established and integrated within the HMIS data system.

The HMTA requires the Secretary of Transportation to issue regulations for the safe transportation of HM in intrastate, interstate, and foreign commerce. In FY 1994, RSPA plans to extend the reporting requirements to intrastate transportation of HM to build a more comprehensive database, as recommended by OTA and GAO. This extension will substantially increase the number of both written and telephonic incidents received. The NRC currently collects over 9,000 telephone reports annually on hazardous materials spills. It is expected that this number will double in FY 1995. We are requesting $370,000 for telephonic support.

**CONSEQUENCES OF NOT FUNDING:**

If these activities are not funded, the Secretary would be in violation of the central reporting system and data center requirements of the HMTA. Not funding the NRC's support would prevent RSPA from furnishing emergency response personnel and other interested persons with technical and other information and advice for meeting emergencies connected with the transportation of HM. The additional $120,000 is required to sustain the increase in telephonic reports expected due to the extended reporting requirements for intrastate carriers.

## PROGRAM: SANITARY FOOD SAFETY

**ACTIVITY: (in thousands):** Implementation and Enforcement of Food Safety Regulations

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 150 | 75 | 0 | -75 |

- In 1990, the President signed the Sanitary Food Transportation Act (SFTA) into law.
- RSPA proposes to abolish the program. Legislation would be required to do this.
- SFTA is outside RSPA's core mission. RSPA has no prior history in regulating the transportation of food.
- The Department of Health and Human Services (HHS) has in place the necessary regulatory authority and operational structure to address SFTA mandates.
- In 1991, RSPA drafted legislation to transfer authority for the Act to HHS, but took no action pending discussions with HHS. In 1992, the Secretary of HHS agreed to pursue the concept of transferring the program to HHS, but expressed concern regarding resources to implement it. No further action in this regard has been taken.
- Although the Vice-President supported SFTA, his Report of the National Performance Review recommends consolidating responsibility for food safety into a single agency.
- Implementing the Act would duplicate HHS's expertise in this area. It would also be costly both to industry and to the Federal government. The Act requires record keeping, cleaning, marking and identification of vehicles, insurance, and a regulatory compliance and enforcement program.
- A regulatory evaluation was conducted by the Volpe National Transportation System Center in Cambridge, Massachusetts. The evaluation found implementation of SFTA would be cost beneficial but the annual regulatory cost to both the highway and rail industry is estimated to range from $5.3 million to $126.5 million.

## PROGRAM: INTERNATIONAL STANDARDS

**ACTIVITY (in thousands):** Advocate United States Position on International Standards

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 0 | 140 | 140 | 0 |

**PROBLEM STATEMENT:**

The formulation and advocacy of United States policies with respect to international HM safety standards is critical to public safety and United States business interests. Our objective is to promote a worldwide system that provides consistency between modes and regions sufficient to guarantee the free movement of HM. Consistency improves safety and compliance with the United States regulations; reduces the need for enforcing United States domestic regulations on import shipments; and is advantageous to the United States favorable balance of trade in hazardous chemicals ($20 billion in 1992).

**ACCOMPLISHMENTS:**

International regulations require continual updating to respond to changes in technology, new and unique HM, and concerns for safety. Each year, RSPA represents the United States in 12 international meetings, hosts public meetings and maintains a computer bulletin board to keep the public informed. RSPA staff prepare over 100 official United States position papers. RSPA also meets with other government agencies to formulate United States positions. RSPA reaches out to industry and public interest groups by participating in four conferences each year.

RSPA published regulations consistent with international performance-based regulations, giving industry greater flexibility in selecting the most suitable packaging and greater possibilities for packaging innovation. Well-defined criteria for the hazards regulated were also included. These changes will further facilitate the United States foreign trade in HM.

Mexico is developing detailed regulations on the transportation of HM. It is important for both countries that these regulations are consistent with the United Nations (U.N.) and the United States regulations. A number of discussions between the United States and Mexican officials have taken place, and a timetable is being developed to complete Mexican regulations. Mexican officials are receptive to the United States assistance, but lack of a Spanish translation of our HMR creates difficulties in making satisfactory progress in this work.

**PLANNED FOR 1995:**

RSPA participates in five international organizations: the U.N. Economic and Social Council Committee of Experts on the Transport of Dangerous Goods, the Working Party on the Transport of Dangerous Goods of the U. N. Economic Commission for Europe, the International Civil Aviation Organization Dangerous Goods Panel, the International Atomic Energy Agency, and the International Maritime Organization Carriage of Dangerous Goods Sub-Committee.

RSPA will continue to represent the interests of the United States before bodies formulating international regulations and support the Mexican Government's development of regulations which are consistent with the United States regulations. We will continue to use funding to translate portions of the United States HMR into Spanish; translation of the total HMR would be cost prohibitive. A Spanish translation of the United States HMR would also prove useful to the Spanish speaking population in the United States, located predominately in Puerto Rico and the southern part of the contiguous United States.

## PROGRAM: SHIPPER AND CARRIER REGISTRATION

**ACTIVITY (in thousands):** Registration System

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 1,232 | 1,000 | 1,050 | +50 |

**NOTE:** These appropriated funds will be offset by collections received from shippers/carriers who register annually.

**PROBLEM STATEMENT:**

The HMTA requires the Secretary of Transportation to register certain shippers and carriers of HM and to required to collect an annual fee of not less than $250 nor more than $5,000 from the shippers and carriers to support an emergency response program. Funds are also collected, and must be appropriated, to administer the registration program.

**ACCOMPLISHMENTS:**

The Final Rule was published July 1992. Although RSPA administers the program, processing thousands of registration statements requires the resources and coordinated efforts of seven major work units: RSPA; HMS; a Data Manager contracted by RSPA to process the registration statements, issue certificates of registration, and maintain and manage the registration data file; an on-site contractor to provide programming support, data analysis, and public information; the United States Treasury; and two banks selected by Treasury to collect the fees and provide other banking services. RSPA worked with the Treasury to design a registration and fee collection system to expedite deposits of money into the Treasury, capture required data, ensure financial accountability, and promptly issue Certificates of Registration. RSPA implemented an extensive outreach program to inform industry of the requirements of the program. In FY 1994, RSPA will continue to refine the administration of the program based on experience gained in FY 1993.

**PLANNED FOR FY 1995:**

Congress required RSPA to charge shippers, carriers, and other persons subject to registration for the cost of administering the registration program and for processing the registration statements. Unlike the funding mechanism for the grant program, the administrative costs of the registration program require an annual appropriation. These funds must be available prior to each registration year to enable RSPA to enter into contracts to process the registration statements. FY 1995 will be the third full year of operation. We will require an FY 1995 appropriation of $1,050 to continue to contract for the collection and processing of data and fees required by the HMTA, for administrative costs to maintain a record keeping system, to provide accountability for the information and funds, to provide Federal, State and local governmental agencies and industry and public representatives with data collected by the program, and to issue Certificates of Registration. An equal amount of money will be returned to the United States Treasury upon receipt of the fees within the same year. RSPA will also continue an aggressive industry outreach program.

## RESEARCH AND DEVELOPMENT

## MISSION & OVERVIEW

The Hazardous Materials Technology Program is mandated by the Transportation Safety Act of 1974 and other legislation. This program provides the technical and analytical foundation necessary to support the DOT's regulatory enforcement and emergency response activities in the area of HM transportation safety.

(in thousands of dollars)

|  | FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|---|
| **R&D Program Totals:** | 1,334 | 1,364 | 1,400 | +36 |
| Breakdown: |  |  |  |  |
| Information Systems | 300 | 300 | 300 | 0 |
| Research & Analysis | 684 | 714 | 714 | 0 |
| Regulation Compliance | 300 | 350 | 386 | +36 |
| Emergency Preparedness | 50 | 0* | 0 | 0 |

* Funded by the Training Curriculum section of the Emergency Preparedness Grants appropriation

## PROGRAM: RESEARCH AND DEVELOPMENT

**ACTIVITY (in thousands):** Information Systems

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 300 | 300 | 300 | 0 |

**PROBLEM STATEMENT:**

New legislative requirements of HMTA and evolving programmatic goals require studies and software to facilitate the analysis and use of collected information.

**ACCOMPLISHMENTS:**

Graphic and geographic representations of incident data have been developed. File structures and data coding schema have been revised to conform the database with regulatory changes. Access to the HMIS has been provided to 53 State and local government agencies and to more than 50 Federal offices. Incident data have been used at the State level to support legislative and regulatory actions, prioritize enforcement efforts, allocate emergency response training resources, conduct research studies, and assist in planning and implementing HM programs. RSPA uses the HMIS to develop information to plan inspections. The enforcement program has an internal tracking system in the HMIS which contains many types of data on enforcement activities.

In addition, a multimodal group under the leadership of HMS has been established to coordinate intermodal HM enforcement efforts. This group developed a shared intermodal database of inspection and enforcement data relating to shippers of HM. In late FY 1992, RSPA began receiving data on shippers and carriers subject to registration. In FY 1992 and FY 1993, those data were integrated into the HMIS and were available for HM transportation studies.

**PLANNED FOR FY 1995:**

RSPA utilizes two sources for developing means to use HMIS data:

- A contract that provides system development services. The contractor provides software that enables RSPA to access and efficiently use HMIS data and prepare specialized presentations of HMIS data; and
- VNTSC, which provides research and development services related to data collection.

A total of $300,000 is requested for system development and analytical services, to:

- Continue to refine the intermodal database. This will enhance RSPA's ability to implement a risk-based approach to planning inspection activities and to obtain more information on previous shipper violations to consider when penalties are recommended.

- Continue to integrate registration data into the HMIS, improve the linking of various data files and improve methods of relating these files with data systems maintained by other DOT elements and outside sources.

- Continue to develop user-access assistance programs for the HMIS and registration data.

Registration information will provide the capability to correlate HM activity to geographic locations and to interrelate RSPA data with other Federal, State, and local government information systems for emergency preparedness and enforcement purposes.

## PROGRAM: RESEARCH AND DEVELOPMENT

**ACTIVITY (in thousands):** Research and Analysis

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 684 | 714 | 714 | 0 |

**PROBLEM STATEMENT NO. 1:**

Research on HM safety problems, packaging and operational controls is critical to support regulatory development and analysis, international standards-setting activities, and the evaluation of exemptions. The knowledge gained is essential to develop safety standards that minimize the risk of HM transportation and the burden on industry, allow maximum operational flexibility, and enhance international competitiveness.

**ACCOMPLISHMENTS:**

The research and analysis program has produced:

- "Hazardous Materials Shipment Information For Emergency Response." This recently completed study focused on the feasibility and necessity of establishing and operating a central reporting system to enhance nation-wide emergency response capabilities. The research effort was required by The Hazardous Materials Transportation Uniform Safety Act (HMTUSA) and was conducted under the auspices of the National Academy of Sciences.

- "Analysis of Hazardous Materials Cargo Tanks." The focus of this research is on the nature of and variation in cargo tank truck accident rates as a function of various highway characteristics (e.g., number of lanes, divided/undivided highways) and carrier type. The analysis was conducted by the Center for National Truck Statistics, University of Michigan Transportation Research Institute.

- "Support For the United States Department of Transportation Response in the New York City Radioactive Materials Routing Case." This study: (1) evaluated the highway routing risk analysis provided by the City of New York in support of its ordinance banning the shipment of certain radioactive materials through its jurisdiction; 2) provided an independent routing risk analysis of three alternative highway routes; and 3) examined whether the New York City ordinance poses an unreasonable burden on commerce.

- "A Comparison of Transportation Hazardous Materials Release Incident Reports Submitted to DOT/RSPA's HMIS With Incident Reports Submitted to the States of New Jersey, New York and

California." This study evaluated the extent to which incidents should have been reported to RSPA, but were not, and the potential increase in the number of reports that would occur from extending the hazardous materials reporting requirements to intrastate carriers of hazardous materials.

- "Development of Test Methods to Determine the Compatibility of Liquid Hazardous Materials with Polyethylene Packagings." The analysis was conducted by the National Institute of Standards and Technology, United States Department of Commerce.
- "Thermally Unstable and Self-reactive Materials." The analysis was conducted by the Bureau of Mines, United States Department of the Interior.

PLANNED FOR FY 1995:

A coordinated research, development, and data integration effort is required to fulfill the potential of ongoing projects, including:

- identification of significant HM shippers by highway and by rail;
- scope and nature of the safety problem represented by low volume/infrequent shippers of HM;
- feasibility and use of bulk package tracking systems to monitor HM container integrity and the scope and nature of the shippers involved in this activity;
- technology-based options for tracking, identifying, and monitoring HM shipments;
- costs and effectiveness of the current HM communication requirements, and technology options; and
- validation and development work on methodologies for analyzing HM transportation patterns.

Anticipated benefits include HMS' ability to: maintain surveillance over the complexities of the HM transportation system to detect emerging issues for informed legislative and regulatory attention; enhance HM transportation safety in an efficient and cost effective manner; and enhance the ability of State and local governments to deal with HM transportation issues in partnership with the Federal government.

Funding of $289,000, the same amount as FY 1994, is requested to support ongoing and research projects. HMS will continue to study the safety benefits of intermodal tracking technologies and will examine computerized risk assessment and management techniques to streamline its own regulatory development and analytical process. HMS will complete a technical guide for State and local governments on whether and how to conduct commodity flow analyses. HMS will also analyze the information to be derived from the registration program and effectively integrate these data with the HMIS and FHWA's Office of Highway Safety's policy and planning process. HMS will begin evaluating the HM information collected through the 1993 Commodity Flow Survey and Truck Inventory and Use Survey. Studies to identify significant shipper volumes, highway and rail accident rates, and methods for analyzing hazardous materials transportation patterns will be completed.

## PROBLEM STATEMENT NO. 2:

The HMR affect most technology-based industries. Through the development of new products and more competitive operations, these industries create new HM, new ways to package and transport HM, and technologies to inspect and test current transportation equipment. Implementing these concepts often requires rulemakings or approvals or exemptions, which in turn are dependent on technical knowledge and analysis for their development. A continuing reevaluation of the HMR is required to keep pace with new developments.

## ACCOMPLISHMENTS:

Based on technical research, RSPA adopted new requirements for cargo tanks used to transport HM (HM-183) and performance-oriented packaging (HM-181). HM-183 is the first comprehensive revision of cargo tank regulations in over 20 years and is a significant safety initiative. HM-181 makes major changes to HM classification, hazard communication, packaging, and handling requirements. It contains many safety improvements, simplifies the regulations, and brings the United States regulations into harmony with international regulations. Research has also provided the information necessary to develop and support the United States positions before international standards setting organizations such as the United Nations, and the International Atomic Energy Agency. It has been used to support the U.N. classification of poisonous materials, organic peroxides, and explosives.

In FY 1993, RSPA has performed immediate evaluations and analyses of operational controls, classification criteria, and packaging and performance standards. RSPA initiated the development of a test method to determine self-accelerated decomposition temperatures for thermally unstable materials based on Accelerating Rate Calorimetry. In addition, a multi-year project at the Sandia National Laboratory on the development of specific accident survival performance criteria for the packaging of bulk quantities of highly toxic HM and an evaluation of the integrity of certain DOT specification packaging for radioactive materials will be completed.

## PLANNED FOR FY 1995:

HMS contracts for studies that use accident experience, information, science, and engineering to identify specific safety problems and to develop countermeasures and regulatory requirements. This diverse technical program is divided into three broad areas: packaging technology, hazard classification, and operational controls.

HMS is requesting $425,000 to perform evaluations and analyses of operational controls, classification criteria, and packaging and performance standards. In addition to continuing ongoing projects, several new projects will be initiated in FY 1995.

Molibdium-99 shipments account for over 75% of all radiation exposure received due to transport of radioactive materials. Current practice for these shipments is to use lead shielding material. If depleted uranium were used instead of lead for the shielding, exposures could possibly be significantly reduced. The purpose of this project would be to determine the amount of reduction in exposure and the impact it would have on the industry.

Shippers are continually seeking stronger and lighter weight packaging for improved efficiency and productivity in the transportation of gases and pressurized liquids. High strength metals and composite material make such efficiency and productivity improvements possible, but these materials have failure modes not fully addressed by current acceptance and requalification regulations. One project will address a lifetime assessment for composite cylinders. The presently used composite fiberglass wrapped-metal cylinders made under DOT exemptions are limited to a 15 year lifetime due to the possibility of failure by static-fatigue/creep rupture. At the present time, there is no established procedure used to determine the safe lifetime for cylinders produced under DOT exemptions. The objectives of this project will be to: measure or obtain the required properties of the filament materials expected to be used in DOT cylinders; and develop an acceptable analysis procedure to reliably predict the lifetime of composite cylinders.

Another project will address retest methods for composite cylinders. The present method (hydrostatic testing and visual examination) for retesting composites may not be adequate to determine if a composite cylinder has undergone degradation during service that will result in a loss of structural integrity. The present retest procedure may not find defects that can occur in the composite and may not determine if the strength of the filament or resin has decreased in service. This project will develop suitable nondestructive testing procedures to be used at the time of cylinder retest to properly assess the structural integrity of the cylinder.

In the area of classification, we plan to continue our work to revise the test methods and packing group criteria for oxidizers in support of the United States position at meetings of the United Nations Group of Experts on the Transport of Dangerous Goods. In the area of operational controls, we plan to continue to evaluate the current transportation index system for radioactive materials and consider improvements to provide greater information to emergency responders. The current system is used worldwide to facilitate the control of radiation exposure to transportation workers and criticality for multiple packaging. Emergency responders need additional information to indicate the level of exposure risk they face. In most cases, the perceived risk is substantially greater than the actual risk, which delays medical help for injured persons and resumption of normal transportation operations.

## PROGRAM: RESEARCH AND DEVELOPMENT

**ACTIVITY (in thousands):** Regulation Compliance (Testing)

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 300 | 350 | 386 | +36 |

**PROBLEM STATEMENT:**

Packagings are critical to the safe transportation of HM. HMS needs to determine the extent of manufacturer compliance with the HMR to protect the public and the environment from unintentional release of HM.

**ACCOMPLISHMENTS:**

RSPA has contracted with a private entity which purchases packagings and tests them based on procedures developed for RSPA. The contractor has provided RSPA with preliminary reports on failures of steel drums and both low and high pressure cylinders. This information, furnished prior to the official test reports, has enabled the enforcement program to plan its strategy for dealing with noncompliance. The contractor also identified a manufacturer of drums of which RSPA was previously unaware.

**PLANNED FOR FY 1995:**

Packagings can now be manufactured in any number of ways, as long as they can meet the performance testing requirements. Testing is, therefore, a much more crucial part of the enforcement program. In fact, the amount of testing will increase dramatically from the present level, since testing may be the only means of gathering evidence to support civil penalty enforcement actions. RSPA's HM enforcement program is focused principally on packaging: how it is made, how it is tested, how it is used, and how it is requalified. Testing performed by contractors assists HMS in identifying manufacturers who are not in compliance so that appropriate enforcement action can be taken to gain compliance.

# RESEARCH, TECHNOLOGY AND ANALYSIS PROGRAM
# FY 1995 BUDGET REQUEST

## MISSION

RSPA's Research, Technology and Analysis (RT&A) program pursues a crosscutting systems approach to transportation issues. This approach provides the Secretary with a critical counterbalance to the modal perspective prevalent in the combined multimillion dollar research, information and emergency preparedness programs of DOT's operating administrations. RT&A program efforts are focused in the following five distinct areas:

**Aviation Information Management** - Provides consistent and comprehensive financial and statistical economic data on individual air carrier operations and the air transportation industry. Approves and disapproves tariff applications by international air carriers.

**Emergency Transportation** - Serves as DOT's manager for the Departmental civil emergency preparedness programs which direct the transportation response to national and regional emergencies arising from natural and technological disasters, economic disruptions and national security crises.

**Research and Technology** - Provides extensive technical support for the Administrator in his/her dual capacity as Chairman of DOT's R&D Coordinating Council and Chief Science Advisor to the Secretary. On behalf of the Secretary, operates a system which ensures Department-wide coordination of R&D, university research, technology transfer, and radionavigation and telecommunication systems.

The RT&A program also encompasses two special facilities, VNTSC and TSI, which impact all three areas of the RT&A program, but receive no direct appropriations.

**The John A. Volpe National Transportation Systems Center (VNTSC)** in Cambridge, Massachusetts is a national center of transportation and logistics expertise. In support of Departmental policy objectives it anticipates future national, state, local, and international transportation and logistics issues and requirements, and responds to current needs and priorities.

**The Transportation Safety Institute (TSI)** in Oklahoma City, Oklahoma, is a national center of educational and technical assistance in transportation safety and security. It is DOT's only intermodal training institute with responsibility for all categories of users: federal, state, and local governments, private sector organizations and international agencies.

## TRANSPORTATION SAFETY INSTITUTE

### REQUEST FOR REIMBURSABLE AUTHORITY

The Transportation Safety Institute was formed in 1971 to provide centralized safety and security training and technical assistance for all modes. It was established under the Assistant Secretary for Safety and Consumer Affairs with executive direction of the Institute assigned to the Federal Aviation Administration (FAA) which administered the employment ceiling spaces used by the Institute as allocated to the FAA. The FAA's Mike Monroney Aeronautical Center also provided budgeting, accounting and payroll, personnel logistics, and other required support on a reimbursable basis.

In 1976, executive direction of the Institute was transferred from the Office of the Secretary to the Research and Special Programs Administration. The FAA Aeronautical Center continued to provide reimbursable services on an overhead cost recovery basis. In 1986, the FAA Aeronautical Center evaluated the cost to support TSI and concluded they were not fully recovering costs with the flat overhead rates. Costs for some services were accrued and billed to reimbursable programs as a direct expense. The costs were monitored and adjusted as direct charges for additional expenses in 1988 and 1990.

Effective October 1, 1993, the budget function was moved to the Research and Special Programs Administration, but the agencies agreed to delay the move of positions until FY 1995 to facilitate the budget move. The FY 1995 budget request includes authority for those reimbursable positions which have previously been included in FAA's employment ceiling request. Since the RSPA is providing for budget activities of TSI, it is more efficient for those positions to be reported and managed through RSPA.

The FY 1995 spending authority reflects TSI's anticipated reimbursable program activity for that year. As of Oct. 1, 1993, the FAA moved their Aviation Security training program and a reimbursable anti-terrorism training program funded by the Department of State from TSI and located it at the FAA Academy in Oklahoma City. The reduced spending levels for FY 1994 reflect that reduction. The FY 1995 budget request reflects TSI's planned program levels as a result of new training programs and technical assistance activities and anticipated modest increases in programs currently at the Institute.

## RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION

### Summary of Requirements - Budget Authority

### RESEARCH AND SPECIAL PROGRAMS
### Element: Aviation Information Management

| | FY 1994 Enacted | FY 1995 Request |
|---|---|---|
| Full Time Permanent (FTP) Positions | 35 | 29 |
| Full Time Equivalent (FTE) Workyears | 33 | 27 |
| ($000) | | |
| Personnel Compensation and Benefits (PC&B) | 2,150 | 2,079 |
| Operating Expenses | 82 | 86 |
| Total Contract Programs | 289 | 289 |
| Breakdown of programs: | | |
| Research/Systems Analysis | 18 | 18 |
| Enforcement | 30 | 30 |
| Data Services Consultation | 24 | 24 |
| Information Processing | 217 | 217 |
| | 2,521 | 2,454 |
| Additional funds allocated from the Program Support activity for communications, utilities, WCF and misc. costs: | 329 | 343 |
| | 2,850 | 2,797 |
| Electronic Tariffs* | 1,000 | 1,000 |

* Electronic Tariffs $1 million contract program is fully funded by a credit in the appropriation language, which is treated as an offsetting collection.

## AVIATION INFORMATION MANAGEMENT
## FY 1995 BUDGET REQUEST

### MISSION

Aviation Information Management comprises two major programs: Airline Statistics and Airline Tariffs.

The Airline Statistics (AS) program's mission is to provide the U.S. government with uniform and comprehensive financial and market/traffic statistical economic data on individual air carrier (airline) operations and the air transportation industry. This currently encompasses over 200 U.S. airlines and about 200 foreign (non-U.S.) airlines. The AS program also provides computer-based special data project support services to DOT users.

DOT uses the airline economic data and special computer project services to support policy initiatives, to accomplish safety and international air travel responsibilities, and to meet international treaty obligations. The airline data are a significant component in DOT's intermodal data banks because most interstate and international commercial passengers travel by air. Other U.S. government agencies use DOT's airline economic data. For example, Environmental Protection Agency uses the data for environmental impact studies, Department of Commerce uses the data to facilitate international commerce and tourism, Department of Labor uses it to compute productivity and consumer price indexes, U.S. Air Force utilizes the data to conduct its military charter programs, and Department of Justice uses the data to manage its customs operations and to make anti-trust decisions.

The U.S. Aerospace Industry, one of the few U.S. Industries with a positive trade balance uses the AS data to develop and market new aircraft. State and local governments use the data for environmental impact studies and to market new air services and facilities. Airlines, financial institutions and academia also depend on the AS data to underpin various aviation related projects.

The amended Federal Aviation Act of 1958 (FAAct) and DOT legislation provide perpetual authority for the AS program to require airlines to comply with its accounting, reporting, and record retention requirements. The FAAct allows civil penalties to be assessed for failure to comply.

The AS program resources are located at DOT headquarters in Washington, D.C. with a field office in Anchorage, Alaska. In FY 1995 the Alaska Field Office will perform the data administration work (receiving reports, editing, etc.) for the small Alaska carriers (approximately 40) filing the Form 298-C report .
This local interface with these carriers will provide more reliable and timely data for the Department's essential air service and intra-Alaskan mail rates.

The Airline Tariffs (AT) program's mission is to administer the Department's program of air carrier tariff filings. Tariffs are filed in accordance with the Federal Aviation Act of 1958, as amended, and 14 CFR Part 221 of the Department's regulations. U.S. and foreign air carriers must file the tariffs setting passenger fares, cargo rates, additional charges, and the rules related to the application of the fares and rates, where the tariffs are applicable to international air transportation.

**POSITIONS**

New: 0

Six positions are eliminated under the AT program in FY 1995.

In Fiscal Year 1993, RSPA conducted a zero-based examination of the AT program's mission and functions. A concurrent evaluation of the program's effectiveness and efficiency was performed in conjunction with the Vice President's National Performance Review. The two analyses reached virtually identical conclusions. From these, RSPA developed and coordinated several management proposals which, when implemented, will yield significant productivity improvements. The resource impacts of these proposals are reflected in the budget estimates for Fiscal Years 1995 and 1996.

## PROGRAM: AIRLINE STATISTICS

**ACTIVITY (in thousands):** Research and Systems Analysis

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 18 | 18 | 18 | 0 |

**PROBLEM STATEMENT:**

A critical objective of the Research and Systems Analysis activity is to understand and reconcile the airlines, especially new airlines, their responsibilities and obligations with respect to airline data accounting, reporting and record retention requirements. AS conducts an on-going educational process with the industry through one-on-one meetings, regional meetings, instructional pamphlets, directives and letters to better understand the prevailing dynamic industry changes.

The challenge for activity is: to assist the DOT in determining what data the DOT needs to fulfill its air transportation program and advocacy roles; to decide whether to obtain the data from existing sources, if any, or whether to burden air carriers with additional data submissions; and to develop and maintain appropriate systems based upon these decisions.

The AS Research and Systems Analysis Activity reviews, evaluates and analyzes the air transportation industry's operations, practices, and procedures in order to align DOT information regulations with the industry's regular and ongoing business activities. The objective is to minimize government intrusion on business and eliminate unnecessary reporting burdens.

Although the total industry reporting burden has increased with the increase in number of carriers, the average reporting burden per carrier has remained constant, because of innovative AS reporting practices and accounting directives (see Table A and B).

**Table A**

| AS Program Burdens | FY1991 | FY1992 | FY1993 | FY1994 Est. | FY1995 Est. |
|---|---|---|---|---|---|
| Industry Burden Hours | 76000 | 86000 | 90300 | 94700 | 99800 |
| Number of Air Carriers | 407 | 425 | 430 | 450 | 475 |
| Burden Hrs/Air Carrier | 187 | 202 | 210 | 210 | 210 |

AS analyzes the airlines' existing accounting and reporting systems and explores alternative, less burdensome systems which will provide the needed data. Typical products of this work include new accounting, reporting, or record retention regulations, or revisions of existing rules.

**ACCOMPLISHMENTS:**

In FY 1994, the number (as shown in Table B) of instructional materials, access requests, and requests for confidential treatment of submitted reports substantially increased. Because foreign carriers do not file financial data, U.S. carriers are filing more requests for confidentiality treatment to preclude any competitive disadvantage in the international community.

**Table B**

| System Administration | FY91 | FY92 | FY93 | FY94 Est. | FY95 Est. |
|---|---|---|---|---|---|
| Airline Instructions | 26 | 26 | 120 | 135 | 160 |
| Industry Directives | 10 | 12 | 12 | 12 | 12 |
| Waivers | 22 | 25 | 33 | 26 | 30 |
| Due Date Extensions | 50 | 31 | 50 | 65 | 65 |
| Special Reports | 13 | 8 | 10 | 12 | 12 |
| Misc. Del-Auth. Action | 219 | 95 | 120 | 145 | 150 |
| Confidentiality Req. | 121 | 162 | 160 | 198 | 200 |
| Access Restricted Data | 190 | 102 | 200 | 200 | 250 |
| Total | 651 | 461 | 705 | 793 | 879 |

The increase in instructional letters coincides with the AS programs's increased enforcement efforts in FY 1994. Carriers must file timely and accurate data or face a civil penalty. Restricted data access requests increased because AS provided data to support for high priority DOT programs (magnetic-levitation and high speed rail ground transportation studies and FAA tilt rotor research program), airline industry marketing and academia research studies. A rulemaking in FY 1994 will have incorporate the small certificated and commuter carriers into the T-100 Reporting System. This change will provide the DOT with more accurate data and with one data system (T-100) that will cover all traffic reporting.

A notice of proposed rulemaking (NPRM) to add three data items to the On-time Flight Performance Reporting System will have been finalized in FY 1994. The additional data will enable the FAA to model programs to reduce air traffic delays which are costing the airline and consumer an estimated $8.5 billion annually.

A NPRM will have been issued in FY 1994, to make the reporting of financial data in ADP format mandatory. This initiative supports the AS program to eliminate paper reporting which is labor intensive.

In FY 1994, AS will have issued a notice proposing to modify and modernize the Passenger O&D Data Base. This data base is critical to the Department's programs and must be modernized to keep pace with changes taking place in the Airline Industry, such as code sharing and cooperative agreements (Northwest's and KLM's on major routes).

The AS program used 6 of its 23 positions in research and systems analysis activities in FY 1994. Three are required for communicating with air carriers on their information obligations, essential air servicing intra-Alaska mail rules, and for handling waivers, extensions, other exceptions work (see Table B). Three positions were used for conducting system reviews, rulemaking activities, and other regulatory functions.

**PLANNED FOR FY 1995:**

Work will begin in FY 1995 to modernize the Passenger Origin-Destination Survey which is a very complex data base and covers industry innovations such as open skies and cooperative working agreements eg., British Airways and USAir engage in code sharing on a great number of routes. These airline working arrangements are expected to increase in number and diversity among U.S. and foreign carriers in FY 1995. The challenge will be to modernize the AS data systems to handle all the idiosyncrasies of all agreements.

In FY 1995, two rulemaking initiatives begun in FY 1994 will be finalized, in order to implement DOT program requirements for economic information. The AS program will conduct a zero-based analysis of the accounting, reporting and record retention regulations to determine costs and benefits, specific data needs, and to examine alternative data sources versus direct collection from the air carrier.

Accompanying work includes overall data systems design, and rulemaking, review of air carrier practices, and procedures to assure compliance. Development of imaginative, alternative, less costly sources of quality AS data will be explored.

The conversion to metric measurement, information reporting in the intermodal environment and AS' interface with the DOT's new Bureau of Transportation Statistics are other work efforts planned for FY 1995. This workload would primarily be supported with the new accountant position.

## PROGRAM: AIRLINE STATISTICS

**ACTIVITY (in thousands):** Enforcement

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 30 | 30 | 30 | 0 |

**PROBLEM STATEMENT:**

Airlines do not always comply with target dates and quality guidelines when they submit reports. The primary objectives of the enforcement activity are to: determine whether airlines are in compliance through the receipt, logging, copying and filing of airline reports; monitor the timeliness of the airlines' reports; and establish formal communication with airlines to resolve delinquent reporting.

Identification of inconsistencies and inaccuracies in airlines' reports and promptly obtaining associated corrections are critical in maintaining DOT confidence in the AS program data bases.

These inconsistencies and inaccuracies are not mathematical errors, which are usually identified and corrected during routine information processing. They are problems that show up among schedules and data sets for one period or over time that suggest the need for further investigation.

Compliance investigations and desk reviews help resolve these data problems. However, the systems used by airlines for gathering and accumulating source data can only be checked in the field, by audits at air carrier offices. This field work is necessary to ensure the uniformity of the airline statistics reported.

**ACCOMPLISHMENTS:**

Four of the 23 AS program positions were used to address the enforcement problems in FY 1994. Two positions were used for enforcement activities involving receipt and control of reports. The reports receipt and control workload follows in Table C.

**Table C**

| Reports Handling | FY91 | FY92 | FY93 | FY94 Est. | FY95 Est. |
|---|---|---|---|---|---|
| Paper Reports Per Year | 8412 | 8833 | 9275 | 9740 | 10275 |
| Computer Media Rpts/Yr | 1740 | 1825 | 1915 | 2010 | 2125 |
| Total Reports/Yr | 10152 | 10658 | 11190 | 11750 | 12400 |
| U.S. Reporting Carriers | 213 | 229 | 230 | 240 | 260 |
| Foreign Reptg. Carriers | 194 | 196 | 200 | 210 | 215 |
| Total Reptg Carriers | 407 | 425 | 430 | 450 | 475 |

The FY 1994 expenses for the ALICE system which monitors and tracks each air carrier's reporting status were constrained to $30,000. A profile of each air carrier's reporting obligations was entered into the ALICE system. A punctuality report was issued each quarter to show air carriers how they did in comparison with their competitors during the most recent six months. Use of the ALICE system and immediate follow-up with delinquent air carriers helped to reduce the FY 1994 average number of days late for reporting (refer to Table D).

**Table D**

| Avg. Days Late/Report | FY91 | FY92 | FY93 | FY94 Est. | FY95 Est. |
|---|---|---|---|---|---|
| U.S. Majors | 1.0 | 0.5 | 0.4 | 0.4 | 0.4 |
| U.S. Nationals | 4.4 | 3.7 | 3.5 | 3.0 | 3.0 |
| U.S. Regional | 5.4 | 8.2 | 8.0 | 7.5 | 6.0 |
| Others | 9.7 | 9.3 | 8.5 | 8.0 | 6.0 |
| Foreign | 25.3 | 14.0 | 13.0 | 12.0 | 10.0 |

During FY 1994, 48 carriers were referred for enforcement, of which 24 were foreign airlines with T-100(f) reporting problems. Because of the increase in new carriers (See Table C) and the implementation of merging small certificated and commuter airlines (298-C) into the T-100 reporting system, referrals in FY 1994 exceed FY 1993 referrals by 10% and approximately $175,000 in penalties were assesses (Refer to Table E).

**Table E**

| Enforcement Activity | FY91 | FY92 | FY93 | FY94 Est. | FY95 Est. |
|---|---|---|---|---|---|
| Total Carriers Referred | 42 | 45 | 50 | 55 | 65 |
| Total Carriers Enforced | 7 | 10 | 9 | 11 | 12 |
| Total Civil Penalties ($000) | 164 | 200 | 165 | 175 | 250 |

One of the four enforcement positions referred air carriers for formal action to the DOT General Counsel, provided coordination as enforcement was pursued and for compliance investigation follow-ups.

The fourth position was used for enforcement activities related to the audit program, to help plan and coordinate, and to facilitate the work. It takes extensive enforcement support to assist IG on-site auditors, to explore their findings, and to implement their recommendations. The IG plans to increase its audit support by auditing at least one large carrier in each group, each year, over the next three years.

PLANNED FOR FY 1995:

Untimely reporting problems will be addressed by gradual escalation of pressure on airlines for timely data submissions. This begins with cordial follow-up letters ten days after reports are due, and following-up later with warning letters and civil penalties.

Data quality problems will be addressed by special assignment of existing staff to accommodate critical compliance investigations and requests for audits by the Inspector General's (IG) Office. Desk reviews will be used as an effective strategy for improving the quality of an airline's statistical data.

Compliance reviews will be initiated to identify changes, and the impact of changes, on the air transportation industry. These reviews can supplement on-site audit work by identifying problematic areas for possible audit by the IG's staff.

The IG began a program in late FY 1993, for on-site audits, to look at key and critical data items produced by the airlines' ongoing financial and statistical systems. The enforcement activity will spend extensive time supporting these on-site auditors, reviewing their findings, and finally implementing or pursuing their recommendations in FY 1995.

## PROGRAM: AIRLINE STATISTICS

**ACTIVITY (in thousands):** Data Services and Consultation

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 24 | 24 | 24 | 0 |

### PROBLEM STATEMENT:

Anticipated user-computer mainframe interface software updates/changes will create additional coordination, consultation and resolution demands for the Data Services Staff in FY 1995. The current Data Services staffing (4 of 23) will not accommodate the work load associated with the software changes and consultation to resolve DOT user's data issues. Significant delays in providing data to the DOT users will result unless requested funding is provided in FY 1995. As users become more proficient, they demand more detailed and complex information about the data they are manipulating, which increases the need for more data consultation.

### ACCOMPLISHMENTS:

In FY 1994, the primary benefits of this activity were to control computer mainframe data processing, user access costs and to decrease the data through-put time by providing the DOT user's direct access for manipulating the AS data systems. This activity controlled program costs and increased productivity primarily in the areas of special project services. Effective management in the use of the computer mainframe processing costs in FY 1994 resulted in savings which were used to cover non-programmed data support for the GAO, DOC, and state governments.

In FY 1994, consultation and ADP data services were provided to support the redesign/modifications associated with the Origin and Destination Data System, 298-C consolidation into the T-100 Traffic Data Systems and finishing the On-Time Flight Performance System.

Four of the 23 positions are divided between data systems development and ADP services/data consultation work. Contract support enabled the data services activity to support DOT user needs that could not be accommodated with the FY 1994 staffing.

### PLANNED FOR FY 1995:

The AS program will continue to provide the Data Services and Consultation support required to: accommodate the anticipated software upgrade/changes; facilitate essential modifications of the seven automated data systems; accommodate new user demands; implement changes to air carrier data reporting. Cost effective computer mainframe data processing activities will be continued to maintain uniform accurate data systems that portray current airline activities and DOT critical needs in FY 1995.

## PROGRAM: AIRLINE STATISTICS

**ACTIVITY (in thousands):** Information Processing

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 228 | 217 | 217 | 0 |

**PROBLEM STATEMENT:**

RSPA must continue to maintain the process for collection, validation, processing, accessibility, and dissemination of airline financial and market/traffic statistical data. The major AS program challenges are to reduce the air carrier reporting burden, reduce the data processing time and provide the DOT, Congress, Federal agencies, aviation industry, and public users faster access to more accurate data. The AS program currently consists of 7 major data systems (see Table F), which need substantial redevelopment work to provide the improvements needed to accommodate airline industry changes such as globalization, open skies, niche carriers, and any new initiatives promulgated by the National Commission to Ensure A Strong Competitive Airline Industry.

**Table F**

| Traffic/Market | Financial | Utility/Applications |
|---|---|---|
| 1. Passenger Origin & Destination Survey | 2. Form 41 | Official Airline Guide(OAG) |
| 3. T-100 (US Carriers) | | Master Coordinated File |
| 4. T-100 (Foreign Carriers) | | ALICE Reports Control |
| 5. Schedule 298-C | | Airline Addresses |
| 6. INS I-92 | | Carrier Code |
| 7. Form 234 Flight Delay | | Aircraft Code |

Transitioning from the evolved 7 data systems (1960-92), and associated 1st/2nd generation software applications to integrated mainframe-client server configurations with 4th generation software applications must be undertaken, if the DOT is to proactively respond to the anticipated dynamic changes pertaining to the airline industry's operation initiatives.

**ACCOMPLISHMENTS:**

In FY 1994, AS collected, processed and disseminated domestic passenger movement statistics including financial data and both origin and destination data, non-stop market data to meet mandates of the CAB Sunset Act of 1984. In excess of 11,000 traffic/market and financial reports pertaining to over 400 U.S. and foreign carriers were collected, validated and stored for DOT and other government organizations to access and use (refer to Table C).

Nine of the 23 positions and four contract personnel were currently used for information processing in FY 1994. All the data were processed using the DOT's Transportation Computer Center (TCC) computer mainframe except for the Form 41 Financial Data which was moved to a RSPA PC-LAN based configuration in FY 1994. Significant TCC mainframe cost savings were realized in FY 1994. These savings were used to begin the initial data systems modernization assessments to support systems requirements analyses needed for determining mainframe-client server applications.

**PLANNED FOR FY 1995:**

The FY 1995 Information Processing program is estimated to cost $717,000: $217,000 in appropriated funding, together with an anticipated $500,000 user reimbursement from the FAA. This will enable AS to maintain the estimated (no increased demand) FY 1995 level of computer mainframe data processing: ($366,000); contract support: ($326,000); and data base purchases: ($25,000). No new data initiatives can be supported unless existing data systems products are reduced in frequency of production or terminated until funding becomes available. Modernization efforts in FY 1992-94 could not begin because funding was denied.

Migration of the origin and destination data system and related applications from the mainframe to the client-server will be investigated in FY 1995. The objective of this data systems modernization effort is to provide the DOT users and the air carrier industry with a mutually compatible 21st century data system which is both user friendly and cost effective.

## PROGRAM: AIRLINE TARIFFS FILING SYSTEM

**ACTIVITY (in thousands):** System Modernization

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 1,000 | 1,000 | 1,000 | 0 |
| Projected Offsetting Collections from Tariff Filing Fees: | | | |
| 1,000 | 1,000 | 1,000 | 0 |

**PROBLEM STATEMENT:**

RSPA's Office of Automated Tariffs collects, approves and archives international air carrier tariffs. U.S. and foreign air carriers engaged in international transportation are required to file tariffs setting their prices for moving passengers ("fares") and cargo ("rates") and the specific conditions ("rules") under which those prices apply.

All tariffs except those for passenger fares are still processed manually in hard copy form. Procedures unchanged since the 1930's hinder the industry's ability to respond rapidly to market changes in an extremely competitive environment. The gap between the industry's electronic speed of response to changing market conditions and the manual processing of tariff filings will continue to grow unless changes are made in both the structure of the program and the manner in which it is accomplished.

Section 1103 of the Federal Aviation Act requires that DOT not only collect, but also be "custodian", of the tariff data. Because of this, RSPA has maintained a duplicate database of archival records, even though a single industry filing agent maintains and DOT analysts utilize a complete database representing more than 90% of all filings. Furthermore, the cost of maintaining the virtually untouched duplicate database has left little of the user fee collections to apply toward the use of information technology.

**ACCOMPLISHMENTS:**

In FY 1993, RSPA conducted a zero-based examination of the Airline Tariffs (AT) program's mission and functions. A concurrent evaluation of the program's effectiveness and efficiency was performed in conjunction with the Vice President's National Performance Review. The two analyses reached virtually identical conclusions. From these, RSPA developed and coordinated several management proposals which, when implemented, will yield significant productivity improvements.

One of the immediate benefits of the joint effort to "reinvent" the AT program was the deregulation of cargo tariffs. The rates for international air transport of cargo have increasingly been set by freight forwarders, rather than by airlines. The result has been that RSPA has been engaged in the labor intensive business of collecting and filing paper copies of documents which represent a declining share of the commercial activity. As an incomplete database, it is of little value to analysts. By issuing a blanket exemption to the requirement for filing cargo tariffs, RSPA was able to remove a double burden from the affected airlines: the cost of producing paper copies of tariffs they maintain electronically and the cost of filing fees when submitting those copies to RSPA. RSPA also achieved a reduction in the staff labor associated with maintaining the cargo tariffs.

While cargo tariff deregulation reduced total user fee collections, other actions eliminated certain fixed costs that had consumed much of those collections. In FY 1994, RSPA cancelled further development of the Interim Electronic Tariff System (INETS). So long as there remained a statutory requirement to maintain custody of the data, RSPA would simply copy and warehouse the industry's data tapes. Since all users preferred to rely on the industry's database, no program functions would be adversely affected. These two changes resulted in annual savings of approximately $400,000.

Finally, in FY 1994 RSPA developed a detailed implementation plan for system modernization by which to achieve full automation of the passenger tariff system in FY 1996. As envisioned, the AT program would consist of a single program manager, assisted by support service contractors, who would meet users' needs for tariff data through the use of expert systems to automatically perform the routine reviews and approvals that were formerly done page-by-page by program analysts. Special searches or identification of non-routine matters can be performed electronically through the use of programs crafted at the direction of the program manager.

## PLANNED FOR FY 1995:

In FY 1995 RSPA plans to continue implementing the plan for system modernization. The efficiencies achieved from these changes as well as from the deregulation of cargo tariffs and cancellation of INETS are expected to be so great that RSPA will be able to manage the AT program with a staff of six. Five persons will process the passenger tariffs. A sixth person will be responsible for implementation of the full systems modernization plan. This will entail the coordination of changes to both the regulations governing tariffs and the procedures for ensuring compliance with the revised regulations. When the system is fully automated in FY 1996, all clerical and routine ministerial functions will be performed automatically by expert systems designed and maintained by a single program manager with some contractor support.

## RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION

### Summary of Requirements - Budget Authority

### RESEARCH AND SPECIAL PROGRAMS
### Element: Emergency Transportation

| | FY 1994 Enacted | FY 1995 Request |
|---|---|---|
| Full Time Permanent (FTP) Positions | 7 | 7 |
| Full Time Equivalent (FTE) Workyears | 7 | 7 |
| ($000) | | |
| Personnel Compensation and Benefits (PC&B) | 568 | 581 |
| Operating Expenses | 109 | 112 |
| Total Contract Programs | 165 | 584 |
| Breakdown of programs: | | |
| Operational Readiness | 80 | 80 |
| Transportation Resource Mgmt | 0 | 50 |
| Crisis Management | 85 | 454 |
| Research and Development | 0 | 50 |
| | 842 | 1,327 |
| Additional funds allocated from the Program Support activity for communications, utilities, WCF and misc. costs: | 70 | 83 |
| | 912 | 1,410 |

## EMERGENCY TRANSPORTATION

## FY 1995 BUDGET REQUEST

### MISSION

Emergency Transportation (ET) programs provide a capability for the Secretary to exercise operational oversight and execute the Departmental activities in civil emergency preparedness for transportation services in response to the full spectrum of crises. The programs fulfill the Secretary's statutory and administrative responsibilities for providing transportation services during national and regional emergencies to protect the public safety and national security.

**Operational Readiness** - Develop and implement plans and training and exercise programs to maintain an operational organization of skilled personnel and support systems which can be activated for any emergency situation. This organization provides immediate action to mitigate the effect of catastrophic disasters on the American people and to protect the Nation's security.

**Resource Management** - Develop and maintain programs and systems to acquire civil transportation resources and prioritize movements to meet essential emergency demands. Perform analysis of transportation requirements generated by the emergency situation, and assess the impacts associated with providing transportation services in emergency operations. Coordinate results of assessment with appropriate policy decision staff to ensure that a viable transportation system is maintained.

**Crisis Management** - Develop and maintain programs to provide the supporting infrastructure for the Departmental crisis management organization and leadership during emergencies which have both single or multimodal impacts. This infrastructure includes supporting facilities, communications, reporting systems, and an automated information/decision support system.

## PROGRAM: EMERGENCY TRANSPORTATION

**ACTIVITY (in thousands):** Operational Readiness

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 38 | 80 | 80 | 0 |

**PROBLEM STATEMENT:**

RSPA is responsible for ensuring that DOT is adequately prepared to respond to the full spectrum of emergencies, supporting the relief and recovery of citizens touched by disaster and meeting the national security requirements. Operational readiness programs provide for plans and a well trained organization to perform and execute the plans in response to national and regional emergencies.

It is impossible to predict with certainty when a catastrophe will strike the U.S. A 1988 report from the U.S. Geological Survey predicts a 70% probability of a major earthquake of Richter magnitude 7.5 or greater over the next 30 years along the southern San Andreas fault, which includes the entire Los Angeles Basin. A magnitude 7.5 earthquake would devastate the city, including the transportation system, and has the potential to kill 3,000 to 17,000 people. Because of the area's vulnerability it would be 100 times worse than the much heralded Loma Prieta earthquake. The Los Angeles Basin is a critical risk area, because of the probable impact a catastrophic earthquake would have on many national economic aspects of transportation services. Transportation is critical to international trade, long term economic health, industrial production, military operations for national security interests and other peripheral effects. California is not the only area facing a potentially devastating seismic risk. The New Madrid fault in the center of the U.S. was the scene of the greatest earthquake in the Nation's history, a trembler estimated at Richter 8.5. Seismologists now indicate that enough stress has built up along this fault to create a magnitude 7.6 event, potentially damaging an enormous area from St. Louis to Memphis. This area also presents a critical risk scenario with potential for catastrophic human casualties and devastation to the Nation's economy. Much of the Nation, and particularly Alaska, the Puget Sound, Idaho, Utah, South Carolina, and New England, also face some level of seismic threat.

Although earthquakes may represent the natural phenomenon with the greatest potential for catastrophic destruction, hurricanes should also be a source for concern. Historically, major hurricanes occur in cycles of about 22 years. We are now nearing the end of a "weak" cycle, during which only 10 major hurricanes struck the U.S. By contrast, the previous "strong" hurricane cycle produced 18 destructive hurricanes. Population has increased dramatically in the "Sun Belt" and some 44 million people now live in the danger-prone coastal counties from Texas to Maine. Insured property value is nearing $2 trillion. Clearly, it is not a question of "if" ET's operational readiness process will be needed, but rather "when." ET's operational readiness programs will also address the risk areas for adverse weather related events which would impact transportation services and the national economy.

ACCOMPLISHMENTS:

The cornerstone of DOT's plan is crisis management teams at Headquarters and the field, which coordinate the transportation of relief supplies to the disaster area and provide Federal assistance in the restoration of the transportation infrastructure. Assigned to these teams are nearly 500 DOT employees, with emergency response as a collateral duty, and 300 industry volunteer Executive Reservists. RSPA has developed its operational plans which rely upon the crisis management teams to manage delivery of transportation services in emergency situations. The operational readiness programs have provided training and exercises for the teams. In 1993, for example, over 500 personnel participated in these training and exercise activities around the nation. Through these well-established crisis management mechanisms, RSPA has ensured DOT's readiness for past emergencies without incurring the high fixed cost of a large permanent staff. Executive Reservists serve without compensation and participate at their own expense. The training RSPA has provided enhances their value to DOT and maintains interest at minimal cost. Likewise, since 1967, the Regional Emergency Transportation Coordinator (RETCO) system has provided another cost-effective and innovative means for achieving effective Departmental regional emergency management using existing DOT personnel and resources. Because of the effectiveness of this system, the Secretary was able to begin directing Departmental response actions within hours of the Loma Prieta earthquake and to respond instantly to the intense demands of Operations Desert Shield/Storm, and DOT had its Regional Team in place to assist the victims of Hurricane Andrew even before the eye of the storm passed.

PLANNED FOR FY 1995:

In FY 1995, RSPA is requesting $10 thousand to develop and refine new innovative processes to ensure that the crisis management team and plans that make up the Department's emergency preparedness program can be responsive in any emergency. The principal project will be the development and implementation of a comprehensive training and exercise program element at Headquarters and in the field. Training for emergency response teams was one of the highly recommended actions by the Congressionally mandated study done by the National Academy of Public Administration. At least 12 regional training sessions, several large scale national practice exercises, and a series of local risk area tests will be conducted for the more than 700 DOT crisis management and response personnel, including Federal employees from DOT and associated Federal agencies and Executive Reservists. All response personnel are expected to participate in some form of training at least once every two years. Further, on average, there has been a 25% annual turnover rate in the cadre of response personnel. This program element is expected to cost $15 thousand for contractor support in developing the training and exercise scenarios, events, and training materials, as well as assistance to ET staff in presentations. Resource constraints in prior years severely reduced the availability of training and practice exercises for the crisis management teams. A new Federal Response Plan was implemented in 1992 and is being radically revised based on recommendations in the aforementioned National Academy of Public Administration study. For these reasons, training is needed now more than ever to ensure the necessary high level of preparedness and performance to meet the people's needs in natural and manmade disasters.

As operating budgets throughout DOT grow more lean, RETCOs are less able to bear the costs of those expanding ET tasks mandated by the expected Federal response to disasters which RSPA assigns on behalf of the Secretary. The operational costs of their collateral duties should be borne by RSPA as the assigning organization. Accordingly, RSPA is seeking the modest amount of $55 thousand to pay for the collateral functions assigned to the ten RETCOs (i.e., $5.5 thousand each). This will provide operations support funds at the minimum level necessary to maintain their continuing preparedness for emergencies, as well as logistical arrangements for training sessions. In addition, funding is provided for the RETCOs to participate in the Congressionally-mandated interagency safety reviews associated with commercial nuclear power plants. The RETCOs' staffs participate in approximately 50 such reviews each year.

## PROGRAM: EMERGENCY TRANSPORTATION

**ACTIVITY (in thousands):** Transportation Resource Management

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 50 | 0 | 50 | +50 |

**PROBLEM STATEMENT:**

ET's Resource Management Program provides for the development and maintenance of a process to provide management direction of the use of the Nation's civil transportation system in any emergency, whether initiated by natural or technological disaster, civil disorder or national security requirements. This process provides the Department's senior officials and crisis management teams a management tool through which to acquire transportation resources and to prioritize the use of civil transportation resources to meet the essential military and civil transportation demands of the emergency. Significant changes are underway within the Department of Defense which redirect the focus of military operations from global war to rapid response to regional conflicts. These changes (including a global repositioning and restructuring of military forces) create different, and in some cases, more demanding transportation requirements upon specific sectors of the civil transportation resource. The programs and tools developed to support the Secretary in the execution of Departmental responsibility (and managed for the Secretary by the Office of Emergency Transportation) must be systematically assessed against the changing requirements and modified as appropriate to ensure continued capability to produce the necessary results. In addition to changing the Programs to keep pace with national security needs, adaptation of the programs to more effectively support contemporary concerns of natural disasters, including the new and revised Federal Response Plan, will continue in FY 1995.

The Resource Management Program is the Department's principal tool for interagency emergency preparedness planning and for coordinating civil transportation operational support for such emergencies as discussed above. It is essential that the Department identify the program changes needed to ensure its continued capability to provide the necessary support in national emergencies. The Department must assess its mandate for action in coordinating civil transportation resources in emergencies, what shaped it, what has changed, and whether the existing tools (principally the priorities and allocations authorities conferred by the Defense Production Act of 1950, as amended, mobilization orders, Code of Federal Regulations, and Memoranda of Understanding) are adequate to meet the Secretary's statutory responsibilities in regional defense scenarios or natural/technological disasters.

**ACCOMPLISHMENTS:**

RSPA has continued to work with the Federal Emergency Management Agency, Department of Defense, and the rest of the Federal emergency preparedness and response community to adapt the Departmental programs and plans to current transportation resource requirements. In particular, RSPA has provided the Departmental leadership for FEMA's Federal Response Plan revision initiative. This staff's intensive effort resulted in new direction for providing transportation services in support of response to disasters. Secondly, RSPA has coordinated very closely with the appropriate DOD agencies including the Joint Chiefs of Staff's Logistics Directorate, the United States Transportation Command, the United States Forces Command, Air Mobility Command, and the Military Traffic Management Command on the civil transportation elements of developing mobility requirements for military operations. The staff has conducted a continuing outreach program of membership and participation on planning boards and committees for logistical support of national security needs. Through these involvements, the staff has contributed to the development of national security operations plans which make effective use of civil transportation resources with minimal economic and operational disruption to the private sector using existing laws and administrative tools.

**PLANNED FOR FY 1995:**

In FY 95 RSPA, is requesting $50 thousand to conduct a systematic assessment of the adequacy of existing laws and administrative tools to carry out the Department's statutory responsibilities under emergencies in light of dramatic changes in defense mobility requirements and increasing demands upon Federal agencies for timely and comprehensive response to natural and technological disasters. RSPA plans to undertake a contractor assisted study during FY 95 which will answer questions raised in the problem statement on assessment of the Departmental mandate. This study is estimated to cost $35 thousand. It will also identify what new initiatives, i.e., legislative, technological, policy, etc., are needed to eliminate any gaps in DOT's emergency response capabilities including the expanding requirement of the Federal Response Plan.

Once the priorities for actions and the direction of change are identified, RSPA will conduct a series of workshops to produce the specific tools needed to implement the necessary programs. A contractor will facilitate the workshops which will be comprised of key organizations from the transportation industry and the customers served by the Department in catastrophic disasters or national security emergencies. The workshops will produce specific products which will implement the findings of the early effort. A series of three workshops is planned.

- The first will address tools in the Department to include, drafting new or changed Departmental orders, drafting proposed legislation (if appropriate), to supplement the Defense Production Act and orders, and developing any interagency tools to carry out Departmental emergency response found to be needed.

- The second will address tools which link the Department and other government agencies in resource relationships. It will draft Memoranda of Agreement and other appropriate products to modernize organizational relationships on a wide range of resource matters such as emergency fuel distribution and use of Presidentially delegated authorities to support government emergency missions on a priority basis.

- The third will address government and non-government organizational resource issues and will draft necessary changes to agreements which link civil agencies, the Department of Defense, and transportation industry in supportive resource relationships such as the Civil Reserve Air Fleet Program.

The success of these workshops is based upon three factors:

- First, they will be comprised of the agencies that perform the functions during actual emergency conditions.

- Second, the work will be focused upon producing specific products which will modernize their relationships, supplement any gaps in authorities, and strengthen their combined effectiveness.

- Third, the output of the workshops will be turned into an organized blueprint of action for the Department's resource management program to implement.

The estimated cost for supporting the development and conduct of these workshops by a contractor is $15,000.

## CONSEQUENCES OF NOT FUNDING:

There is wide reliance on DOT's resource management programs to ensure adequate civil transportation resources are available to meet essential needs. The military relies upon DOT to provide civil transportation for global force projection in the national security interests. Likewise, individuals affected by disasters look to us for the movement of essential goods, services, and people. Failure to adapt to meet these critical needs will result in plans that are not responsive to contemporary risks, with grave consequences for the Nation's security and the safety and well being of our citizens.

## PROGRAM: EMERGENCY TRANSPORTATION

**ACTIVITY (in thousands):** Crisis Management

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 0 | 85 | 454 | +369 |

**PROBLEM STATEMENT:**

This program provides for development and maintenance of the Secretary's crisis management infrastructure which includes facilities, communications capability and, perhaps most importantly, a capacity for rapid information acquisition, analysis, and dissemination. Included among this program element is a system for monitoring and reporting on developing emergencies. In addition, facilities must be provided to insure the continuous, effective operations of the Secretary's policy staff offices and the Departmental national and regional crisis management teams in the face of any contingency, including the disabling of DOT Headquarters or regional offices. Finally, key DOT policy officials must have precise and up-to-date information on transportation facilities and an accurate impact assessment to make prompt resource management decisions in the chaos of a crisis. The current Crisis Management Center is being incrementally upgraded from a conference room with an antiquated telephone system to a state-of-the-art operations center. In the past, the Center has been quickly overwhelmed by unexpected demands of major emergency events like Hurricane Andrew because of the Secretary's direct involvement as the leader for a Presidentially established crisis management task force, and simultaneously the performance of DOT's routine emergency response functions. Likewise, it has not served previous crisis situations very well. The Congressionally mandated study by the National Academy of Public Administration recommended that Federal response organizations have effective communications and information systems to reach the people affected by the disaster. Therefore, it is incumbent upon the Department, as the lead agency for civil transportation services in response to disasters, to have an adequate crisis management infrastructure.

**ACCOMPLISHMENTS:**

Some efforts have been taken to enhance the automated emergency information system, which is an essential foundation to all of DOT's crisis management plans. The heart of this system is the Emergency Transportation Data Base, designed in the mid 1970s with a few periodic updates. It currently includes a 186,000 record inventory of rail, highway, airports, seaports, and transit facilities throughout the Nation. This data base must be modernized to be useable in the current crisis management environment of natural and technological disasters and current national security threats.

As a measure of the reach and intensity of RSPA's crisis management analytical reporting system, ET monitored and analyzed the transportation impacts of 50 emergencies in FY 1992 and more than 60 in FY 1993. These ranged from the eruption of Alaska's Mount Redoubt to the international deployment of military force in the Somali Provide Hope Operation to the effects of Hurricane Andrew. During any emergency event, comprehensive situation reports were prepared and published for DOT management and the Federal community. These reports provide an assessment of the impact of the crisis on transportation, giving the decision makers an appropriate analysis.

**PLANNED FOR FY 1995:**

In FY 1995, RSPA is requesting $454 thousand for crisis management projects to improve and maintain the Departmental Crisis Management Center's infrastructure. Included are the communication system and the emergency information system. The largest element among these projects will be completion of the update of data on transportation systems (airports, ports, rail yards, etc.) in DOT's automated transportation emergency information system begun in FY-94. This system is essential for informed decision making by the Secretary and other senior policy and management staff in an emergency situation. It is estimated that this project element will cost $125 thousand. A second step will be completion of the user friendly graphic mapping capability (geographic information system). This system incorporates the textual data in the information system into a map display to allow rapid, automated visual analysis and display of the impact of the disaster on the transportation network. This capability would be vital to support critical decisions on the flow of relief supplies by the Secretary and other key executives if an earthquake or similar catastrophe devastates the transportation infrastructure. The estimate for completion of this project is $100 thousand.

The final Crisis Management Center improvement project will be modernization of the outmoded communications system. The project will include the initial purchase of state of the art components such as visual information display capabilities and dedicated computers to link with emergency managers in the Departmental field crisis management centers and within DOT headquarters. This improvement project is estimated to cost $229 thousand.

**CONSEQUENCES OF NOT FUNDING:**

Decisions in the chaotic environment of a disaster are critical to saving lives and protecting property. Without adequate information and effectively functioning management facilities, DOT's response to the demands of a catastrophic event will be greatly hampered. Timely decisions will be delayed and the communication of these decisions will be impeded. Federal response in time of emergency could be severely compromised. This would not be in the best interest of the public whom we are dedicated to serve.

## RESEARCH AND DEVELOPMENT

### MISSION & OVERVIEW

The R&D Program provides for research to develop new technologies and approaches to meet mission requirements.

**ACTIVITY (in thousands):** Emergency Transportation Information System

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 0 | 0 | 50 | +50 |

**PROBLEM STATEMENT:**

When a transportation emergency occurs, it is too late to begin collecting information on system vulnerabilities and alternative resources. Informed decision making in the midst of a chaotic emergency demands immediate, accurate, and up-to-date information on the transportation system and its capabilities. It is RSPA's responsibility to ensure the availability of such information through the collection, analysis and aggregation of data and the design of an automated system to access and process this data.

DOT relies on a nationwide network of Regional Emergency Transportation Coordinators (RETCOs), under the policy direction of RSPA's Office of Emergency Transportation, to provide immediate DOT on-site representation in the event of an emergency affecting civil transportation. A critical element of the support RSPA provides for the DOT's emergency managers is access to information on transportation resources available for sudden, unanticipated needs. Maintaining the currency of the emergency transportation information system is critical for ensuring the utility of the data and system in an emergency response.

**ACCOMPLISHMENTS:**

The emergency transportation information system played an essential role in DOT's successful response to prior emergencies. The heart of this system is the Emergency Transportation Data Base of 186,000 records. It provided information on transportation system capabilities, vulnerabilities and alternatives in the wake of the Loma Prieta earthquake. If the data had been current, it would have enabled DOT to provide similar rapid response to the needs of the U.S. armed forces for unprecedented civilian airlift and sealift support for the massive deployment under Operation Desert Shield.

**PLANNED FOR FY 1995:**

RSPA is requesting $50 thousand to provide for basic research supporting enhancements of the Department's emergency geographics information system (GIS). As new technologies emerge, these will be examined to determine their potential application to the system. Advancements in hardware must be researched to permit faster processing of the vast quantity of data required in the GIS environment. Further, the system currently being developed uses relatively rudimentary software with limited capacity. New GIS programs are constantly emerging, so these must be identified, evaluated, and, if found advantageous, adapted to a transportation application. This project will insure that the Department's automated system for analyzing the impact of disasters will not remain static, but will mature into a contemporary, state-of-the-art system for the 21st Century.

## CONSEQUENCES OF NOT FUNDING:

Failure to maintain the emergency transportation information system that is the central component of the DOT's emergency preparedness strategy will result in a rapid and steady degradation of the DOT's ability to train for and respond to emergencies affecting the nation's civil transportation system. There is a very real likelihood that more deaths and injuries will result if response to a disaster is delayed because the DOT lacks accurate information and the ability to analyze it. In addition, the Secretary and the President could be embarrassed by faulty decisions based on outdated information.

## RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION

### Summary of Requirements - Budget Authority

### RESEARCH AND SPECIAL PROGRAMS
### Element: Research and Technology

| | FY 1994 Enacted | FY 1995 Request |
|---|---|---|
| Full Time Permanent (FTP) Positions | 13 | 13 |
| Full Time Equivalent (FTE) Workyears | 13 | 13 |
| ($000) | | |
| Personnel Compensation and Benefits (PC&B) | 1,155 | 1,285 |
| Operating Expenses | 111 | 126 |
| Research and Development | 500 | 1,390 |
| | 1,766 | 2,801 |
| Additional funds allocated from the Program Support activity for communications, utilities, WCF and misc. costs: | 130 | 154 |

## RESEARCH AND TECHNOLOGY

## FY 1995 BUDGET REQUEST

### MISSION

RSPA's Research and Technology programs provide the Departmental oversight necessary to assure its R&D program is effectively advancing U.S. transportation technology and expertise. Their multimodal systems approach provides the Secretary with a critical counterbalance to the modal perspective of all other DOT operating administrations. They also provide analyses on specific technology areas, and assure that the Department's efforts integrate with Government-wide technology initiatives and thrusts.

These activities provide the technical base for the RSPA Administrator to support the Secretary as Chairman of DOT's R&D Coordinating Council and his/her Chief Science Advisor. This ensures Department-wide coordination of R&D policy planning, university research, technology transfer, and development of radionavigation and communication systems. These activities assure that DOT's program of R&D is relevant, coordinated, cost-effective, and responsive to present and future needs. They also assure that the Department's actions are consistent with broader Federal thrusts like the President's Technology Initiative.

Research and Technology helps assure that the results of this R&D and other innovative efforts from around the country are made available in a useful form to federal, state and local elected and appointed officials, the transportation community and academia. Research and Technology provides planning and analysis on the federally sponsored civil radionavigation and radiocommunications systems, with responsibility for development of the biennial Federal Radionavigation Plan. The program also entails the annual issuance and administration of approximately $20 million in grants to University Transportation Centers and University Research Institutes. It provides coordinated development, oversight and dissemination of the results of university-based research and education programs.

### POSITIONS

New: 0

No new positions are requested in FY 1995.

## PROGRAM: RESEARCH AND DEVELOPMENT

**ACTIVITY (in thousands):** R&D Planning and Management

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 0 | 85 | 810 | +725 |

**PROBLEM STATEMENT:**

President Clinton's policy statement *"Technology for America's Economic Growth: A New Direction to Build Economic Strength,"* sets forth his vision that "American technology must move in a new direction to build economic strength and spur economic growth." The policy sees a sustainable national transportation system as essential for the competitive, growing economy to which the Clinton-Gore Administration is committed. Sustainable transportation implies achievement of a harmonious balance among and within individual modes of transportation, based on performance, cost, resource use and social impact characteristics. Sustainable transportation can only exist as one element of sustainable society, and will necessarily depend on evolution not only of transportation infrastructure, but also of societal values, particularly land-use patterns, travel behavior and institutional responsibilities at all levels of government.

Balancing the demands for increased capacity, greater mobility, and environmental quality will require innovation and investment in transportation technology through a well-formulated research and development process. The time and energy required to bring about transportation innovation is a daunting obstacle, but must not prevent action or intimidate the transportation research community. Today's challenge is to shape the future by beginning now to create the next generation of transportation technology and operational innovations.

**ACCOMPLISHMENTS:**

- Consensus was reached among the operating administrations and the first set of guidelines for DOT research and development was produced.

- The Surface Transportation Research and Development Plan was submitted.

- Continued to highlight a number of multi-modal technology areas which are the focal points for Department-wide integrated technology development areas including:

  - **Vehicle Technology** - creating a new, globally-competitive generation of transportation vehicles producing little or no pollution while achieving safety and performance at least comparable to current vehicles, consuming only domestic fuels and minimizing use of non-renewable materials;

- **Infrastructure Maintenance, Rehabilitation and Renewal Technologies** - improving methods of infrastructure design, construction and maintenance yielding lower costs, better performance, longer service life, and reduced environmental impacts;
- **Technologies for Traffic Control and Management** - improving transportation system safety, capacity, efficiency, and productivity through applications of advanced surveillance, sensor, communications, software, data management, and display technologies to system operations;
- **Transportation System Operational Strategies, Planning and Management** - improving transportation system performance and economics through improved decisions concerning operational strategies, resource allocation and investment decisions;
- **Monitoring, Modeling and Assessment of Transportation System Performance and Environmental Impacts** - establishing transportation plans, decisions and management actions based on a solid knowledge base concerning implications for environmental and safety impacts; system performance and service levels; public and private sector economic costs and benefits; effects on energy and petroleum consumption; and other areas of societal concerns; and
- **Human Performance In Transportation Systems** - improving safety and operational efficiencies through incorporation of improved understanding of human performance and its relationship to the transportation operational environment.

PLANNED FOR FY 1995:

The amount requested in FY 1995 will be divided equally among the four following program areas:

*Coordination Efforts.* Funding is required to fully coordinate Department efforts so as to ripen the Department-wide integrated technology efforts contemplated by the President's Technology Policy. These efforts will assure that the Department's program of research and development is focused on the highest priority and most productive areas, as identified by the President's Technology Policy and the users themselves, and that the results of this research are made easily available to their ultimate users in a form that can solve transportation problems. It is critical that information is generated and disseminated for a more transportation-literate society and that decisionmakers are provided with the necessary information for improved national decisions and choices.

*Defense Conversion.* The Department has worked closely with the National Laboratories, the Department of Defense, the Advanced Research Program Agency and the National Institute of Science and Technology on the feasibility of applying defense-related technologies to transportation concerns. Technology reinvestment is key to America's long-term economic growth. As called for in the President's technology policy and defense conversion initiatives, resources formerly devoted to defense and other mission-oriented R&D are being shifted to civilian technology programs and "strategic" research aimed at meeting a wide range of critical national needs. This investment in technology development and commercialization will play a fundamental role in stimulating and sustaining an economy that is competitive, that creates high-quality jobs, and that protects the environment.

Since transportation offers multiple potential applications for defense technologies, RSPA's established coordination role must be expanded to include identifying the defense conversion opportunities in transportation and to match transportation needs to emerging resources. Realizing the full potential of research and technology to improve our transportation system will require the dedication, energies, and resources of the entire defense research and industrial sector. RSPA plans to use a variety of studies and focus groups to examine: the most promising dual-use, military-commercial technologies; which future technologies might have both civil transportation and defense applications; what are the market challenges in commercial transportation applications of dual-use technologies; what are the institutional, organizational, and cultural barriers to government-industry cooperative R&D; what is DOT's role in fostering technology partnerships?; and what is the role of the National Laboratories, of the defense industry and of universities in transportation advances and innovations?

*Cross-Cutting Intermodal Transportation Research and Development Studies.* RSPA will conduct a series of studies related to cross-cutting transportation research, including the statutorily-mandated annual Surface Transportation R&D Plan (§6009(b) of ISTEA). Other studies might include an examination of the condition of the global transportation system, national and international transportation needs, and the potential technological responses to these needs. Other efforts will focus on intermodal studies to improve the Department's understanding of the forces which drive long-range demands on the U.S. transportation system as a whole and of their impact on transportation services and infrastructure.

*Outreach to Transportation Users.* RSPA will organize and conduct a continuing program of outreach with transportation providers, users, planners, consultants, manufacturers, state and local governments, and universities in order to gather and share basic data for use in integrated long-range transportation, and transportation-related research and development, planning and decisionmaking. Outreach efforts provided the surest form of real-world feedback by which to validate Departmental plans, program, policies and the assumptions on which they are based. A basic understanding of the forces that drive the supply and demand for transportation is also essential for the meaningful prioritization of the Department's R&D investments.

**CONSEQUENCES OF NOT FUNDING:**

Although the Department has not historically been seen as a major research agency, research and development has always been a significant Departmental activity. A strong research and development program is an inherent and critical component in achieving sustainable transportation. The Department can play a major role in helping the defense industry and the National Laboratories to adjust to the post-Cold War world. Emphasis on transportation related research and transportation-related technological opportunities has greatly heightened. This is the Department's only source of funding to support coordinated research efforts. Without it, the Department's R&D planning will continue to be modally driven.

## PROGRAM: RESEARCH AND DEVELOPMENT

**ACTIVITY (in thousands):** Technology and Knowledge Sharing

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 50 | 50 | 50 | 0 |

**PROBLEM STATEMENT:**

The key to effective use of the $700 million that DOT invests annually in R&D is in its application. State and local governments and the private sector can then create new transportation products and improve transportation services. To accomplish this, the transportation research community and those who will apply their research have to be linked. This activity provides that needed link.

**ACCOMPLISHMENTS:**

Some 30-50 individual technical reports on topics of interest to state and local government are acquired annually by the program: this translates to an active inventory of about 250 technical reports which are provided in response to some 50,000 requests for technical information processed annually. Recent activities have focused on helping state and local governments meet requirements of the Clean Air Act and the ISTEA. A number of products dealing with transit use of "smart highway" technologies have also been disseminated. The program continues to promote the use of Cooperative Research and Development Agreements (CRADAs) at Federal Laboratories. More effective use of the Small Business Innovation Research (SBIR) program as a vehicle to promote R&D commercialization is ongoing. Putting these activities in context, the savings claimed by the state of Florida alone from not having to conduct research on topics covered by the program are greater than the entire cost of the program at the federal level.

**PLANNED FOR FY 1995:**

The program will continue to review technical materials developed by the Operating Administrations and outside sources for dissemination to the transportation community. Specific topics for consideration might include materials on early results from IVHS tests, techniques for congestion reduction and better use of available infrastructure, and meeting the needs of special users. Support of implementation of the Technology Transfer Act of 1986 will continue, with particular emphasis on analysis of successful public/private approaches to cooperative R&D conduct and implementation.

## PROGRAM: RESEARCH AND DEVELOPMENT

**ACTIVITY (in thousands):** Radionavigation Planning and Policy Analysis

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 100 | 175 | 275 | +100 |

**PROBLEM STATEMENT:**

Radionavigation represents the largest federal investment in intermodal infrastructure and, because of its technical complexity, requires intensive planning and interagency coordination. Since the mid-1970's the Department of Transportation has responded to explicit Congressional direction to demonstrate economies in this area. The resultant Federal Radionavigation Plan (FRP), reflecting joint agreements between DOT and DOD, is the instrument of agreement ensuring that national needs are met in the most cost-effective way. With the maturing of satellite technology, major new challenges are at hand not only concerning applications of the technology but also for determining the balance between civilian and military control and how best to achieve global objectives. It is imperative that the FY 1994 edition of the FRP be expanded in scope to address the paramount policy issues attendant to new satellite technologies. This request provides funds for development of the next FRP - including related user outreach efforts, DOT intermodal navigation coordination, and critically important coordination of technical requirements and policy recommendations concerning the Global Positioning System (GPS).

**ACCOMPLISHMENTS:**

This element of RSPA's R&D effort has played a vital part in identifying alternatives and stimulating actions to maintain a soundly based national program for radionavigation. Examples are:

The Federal Radionavigation Plan was published in January 1993, updated with phaseout dates for many land based radionavigation systems, and including an expanded discussion of land user requirements and intelligent vehicle highway systems (IVHS).

Under the leadership of RSPA, the DOT Navigation Council in FY 1993 provided policy recommendations that have led to the formation of a joint DOD/DOT Task Force on GPS, a group now having high public visibility, that is scheduled to report its findings, by the end of CY93, concerning the most efficient way to maximize the utility of GPS for both civil and military users. This includes the possibility of joint civil/military control.

In a separate FY 1993 effort, RSPA also took the lead in coordinating a Memorandum of Agreement between DOT and DOD on the civil use of GPS. In a related agreement it was concluded that to facilitate civil uses of GPS, DOT would establish representation at two existing DOD and Air Force facilities.

**PLANNED FOR FY 1995:**

A new edition of the FRP will be published and approximately 5,000 copies will be distributed. Because of the evolving state of navigation requirements and applications, along with issues such as ownership, control, and funding, this edition will deal more specifically with unresolved policy questions. Upon completion of the 1994 edition, preparations of the 1996 edition will begin, including necessary interactions with the various user group constituencies. This will involve FRP working group meetings with DOD, and joint planning and execution with FAA and USCG of three or four user conferences. The conferences will focus on the identification of user needs to ensure that they will not be compromised by the proposed phase-out of federally provided services and, in addition, to determine how existing and planned navigation systems can be utilized to enhance economic opportunities. FRP coordination and publication with technical support by the Volpe Center will require $200K. Crucial interaction with the civil user community to obtain continuous input into the FRP process will require $15K.

Funding is also required for RSPA's share of costs with FAA and USCG to provide for a required, DOT liaison position at the GPS Joint Program Office, and for a position at the U.S. Air Force Space Command to ensure that civil user needs are met.

## PROGRAM: RESEARCH AND DEVELOPMENT

**ACTIVITY (in thousands):** University Research

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 200 | 190 | 255 | +65 |

**PROBLEM STATEMENT:**

As manager of the University Transportation Center and University Research Institute grant programs, RSPA monitors an annual investment of approximately $20 million in education, research and technology transfer. To do so effectively, RSPA needs to devise: (1) evaluation techniques capable of assessing the overall effectiveness of "centers of excellence" in their entirety, rather than as the sum of their individual research projects; (2) innovative and cost-effective mechanisms for advancing U.S. transportation technology and expertise through academia; and (3) better ways to coordinate with other DOT university programs.

**ACCOMPLISHMENTS:**

In FY 1994 RSPA developed evaluation criteria by which to assess the overall effectiveness of the University Transportation Centers. These relied heavily on the FY 1993 report of the TRB Peer Review Panel which was formed to address this issue. Because each University Transportation Center conducts a multi-disciplinary program of education, research and technology transfer, RSPA needed an assessment tool that could determine not only the success of a University Transportation Center's individual projects, but also the extent of their synergy.

A RSPA pilot project resulted in the first offering of an accredited degree in Transportation Security. As an alternative to long-term Federal funding of the delivery of certain academic programs, RSPA focused on the development of the program. RSPA sponsored collaboration among experts from DOT, industry and academia to identify the curriculum necessary to support an accredited degree. The program they developed can be offered by any academic institution with an accredited Transportation or Security program. Existing academic accreditation mechanisms will ensure continued program quality without the need for further DOT involvement.

RSPA participated in the Summer Transportation Intern Program for Diverse Groups in order to provide future transportation professionals from diverse backgrounds with the opportunity to work closely with individual mentors involved in transportation programs throughout DOT. In addition, RSPA sponsored an assessment of the program's effectiveness in attracting talented individuals from diverse groups into transportation career paths.

In the interests of closer coordination among DOT's university programs, RSPA surveyed DOT's university programs and took the lead in convening a series of information exchanges concerning the plans, products and participants of the several programs.

**PLANNED FOR FY 1995:**

In FY 1995 RSPA will again conduct site inspections and annual performance reviews of all grantees. In addition to the standard review protocol, RSPA plans to apply the new evaluation criteria which address the overall effectiveness of the centers of excellence. This may involve the formation and management of specialized review teams involving outside experts along with the DOT program monitors.

Assuming satisfactory performance by the grantees, RSPA expects to award non-competitive grants to the 3 national University Transportation Centers and 6 University Research Institutes as mandated by statute.

The ten regional University Transportation Centers will be awarded on the basis of a competitive solicitation of proposals, a process initiated in FY 1994. The review and evaluation of proposals received in response to this solicitation will require the formation and management of specialized review teams, possibly involving outside experts.

RSPA will continue to support summer transportation internships for university students from diverse groups, the form of which will reflect the results of the program assessment conducted in FY 1994.

## RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION

### Summary of Requirements - Budget Authority

### RESEARCH AND SPECIAL PROGRAMS
### Element: Program and Administrative Support

| | FY 1994 Enacted | FY 1995 Request |
|---|---|---|
| Full Time Permanent (FTP) Positions | 45 | 45 |
| Executive Direction | 5 | 5 |
| Policy and Program Support | 4 | 4 |
| Civil Rights & Special Programs | 2 | 2 |
| Program Mgmt and Administration | 19 | 19 |
| Legal Services and Support | 15 | 15 |
| Full Time Equivalent (FTE) Workyears* | 53 | 53 |
| ($ 000) | | |
| Personnel Compensation and Benefits (PC&B) | 3,669 | 3,938 |
| Operating Expenses | 2,174 | 2,716 |
| Total Contract Programs | 436 | 747 |
| Policy and Program Support | 0 | 50 |
| Civil Rights & Special Programs: | 9 | 74 |
| Civil Rights | 4 | 4 |
| Drug Program | 5 | 5 |
| FOIA | 0 | 65 |
| Program Mgmt and Administration: | 427 | 623 |
| Budget and Financial Mgmt | 28 | 28 |
| Accounting Svcs Contract | 199 | ** |
| Procurement Support Contract | 0 | 75 |
| Personnel Support Contract | 0 | 50 |
| Information Resources Mgmt | 200 | 470 |
| | 6,279 | 7,401 |
| Additional funds allocated to other elements within RSP for communications, utilities, WCF and misc. costs: | (1,607) | (1,894) |
| | 4,672 | 5,507 |

* Includes a RSPA-Wide pool of 10 FTE.

** Part of Operating Expenses for RSP ($138k) and Pipeline Safety ($51) in FY 1995.

## PROGRAM AND ADMINISTRATIVE SUPPORT

## FY 1995 BUDGET REQUEST

### MISSION

PROGRAM SUPPORT provides policy, legal, financial, management and administrative support to operating offices in their mission to promote the Administrations's policies and the Department's programs. PROGRAM SUPPORT includes activities which directly support the agency's programs in a variety of areas, including the Office of the Administrator (Executive Direction), Staff Offices to the Administrator (Chief Counsel, Policy and Program Support, and Civil Rights), and Management and Administration.

## PROGRAM: EXECUTIVE DIRECTION

The Office of the Administrator provides overall management, strategic direction, and implementation of Administration policy for the agency and its programs.

### POSITIONS

New: 0

No new positions are requested in FY 1995.

## PROGRAM: POLICY AND PROGRAM SUPPORT

RSPA's Office of Policy and Program Support (office) conducts policy reviews and analyses, makes policy recommendations to the Administrator, and provides policy direction and oversight for all agency programs. The office is also responsible for performing public affairs and congressional liaison work. It informs the public, the industry, the media, and the Congress about current RSPA issues, program activities and regulations.

**POSITIONS**

New: 0

No new positions are requested in FY 1995.

**ACTIVITY (in thousands):** Policy and Program Support

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 0 | 0 | 50 | +50 |

**PROBLEM STATEMENT:**

Until June 1993, RSPA used some of its FTE to provide a research assistant position for the office. But, because of anticipated FTE reductions in FY 1995, there will no longer be FTE available to support the position. Former incumbents performed a number of vital duties for the office staff, the Administrator, and the Deputy Administrator. These responsibilities included:

- researching, obtaining, and compiling information for a number of ongoing agency reports supplied to the Office of the Secretary and for other major reports, such as briefing books for hearings, the RSPA Priority Plan, and the RSPA Transition Manual;
- maintaining and keeping current mailing lists of press, trade association, and congressional contacts involved with RSPA programs;
- attending public hearings and taking notes for the Administrator and the professional staff for press releases, reports, briefings, or issues affecting RSPA programs;
- screening congressional and media calls, and determining what information is needed and where to direct each call; and
- setting up meetings and briefings with congressional staff or press.

**ACCOMPLISHMENTS**:

Daily, this office performs the final review for all agency documents with respect to matters of agency and departmental policy, political sensitivity, and coordination. The office also keeps the Secretary, the public, the media, the industry, and the Congress well informed about all RSPA issues, program activities, legislation and regulations. The office is RSPA's official point of contact for the media and as such coordinates and responds to all inquiries ranging from complex technical questions about regulations to press calls generated by emergencies such as pipeline explosions.

**PLANNED FOR FY 1995**:

In FY 1995, RSPA will address several urgent priorities, such as redirection of the pipeline safety program, modernizing the Department's emergency transportation response capabilities and strengthening Department's management of research and development.

Currently, the office has only three professional level staff members, one of these a Schedule A employee with severe physical disabilities. Without contract support for a research assistant, this staff will have to perform many clerical and support duties, which could and should be performed by lower salaried personnel. Having contractor support will free professional staff to perform the managerial and analytical functions of their own positions and ensure that the researching and compiling of information will be performed on a timely basis. When this office is short staffed, the RSPA Administrator suffers.

**CONSEQUENCES OF NOT FUNDING**:

The consequences of not funding the contract services will be that research and office support duties will be performed by the professional staff. The critical shortage of staff will impact the office's ability to provide the Administrator and the program offices with the front-end policy guidance that helps prevent problems arising later in the process. Failure to fund this request will also prevent the staff from working proactively to inform the media, public, and industry about RSPA issues.

## PROGRAM: CIVIL RIGHTS

The Office of Civil Rights, a staff office to the Administrator, is responsible for the administration, coordination, and implementation of the Freedom of Information Act (FOIA), the Privacy Act, and RSPA's Civil Rights Program. In addition, management and oversight are provided for the agency's internal drug testing program.

**POSITIONS**

New: 0

No new positions are requested in FY 1995.

**ACTIVITY (in thousands):** Civil Rights

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 4 | 4 | 4 | 0 |

**PROBLEM STATEMENT:**

o Title VI

Under Title VI of the Civil Rights Act of 1964, each operating element is to ensure that each applicant for, or recipient of Federal financial assistance in the U.S. shall not be denied benefits of or participation in those programs on the grounds of race, color, national origin, etc.

RSPA is now responsible for three programs which impact Civil Rights greatly. In addition to providing pipeline grants to the states, in June 1991, RSPA assumed new responsibilities from OST for two Title VI programs - the University Transportation Centers Program (UTCP) which awards grants to thirteen universities and the University Research Institutes Program (URIP) which awards grants to six universities. Another new responsibility, as of May 1993, was the reimbursable grants to states, territories, and Indian Tribes to enable them to enhance, implement, or develop hazardous materials response planning and training programs.

The Department's Title VI Order requires civil rights monitoring and compliance reviews. RSPA has not conducted any on-site reviews for several years because the volume of our FOIA work and limited staff and financial resources preclude on-site compliance reviews.

o Title VII

In the past, other Operating Administrations within the Department have investigated RSPA's official civil rights complaints through the use of reimbursable agreements. During a period of eight years, RSPA has had only three cases. However, in FY 1993, RSPA has already handled two cases which are still in process. In addition to these two cases, consultations on other possible cases have been forthcoming. At least one of these cases presents the distinct possibility of being brought up formally in FY 1994 and might carry over into FY 1995. Assistance from other modes within DOT, for formal investigation, will not be available since these modes, due to their own increased workloads, have informed RSPA that they will not be able to accommodate our needs. It will be necessary for RSPA to contract out for its formal investigations of EEO complaints. Fees, depending on individual cases/class action suits, range from $2,000 to $6,000 per investigation. Investigation costs can also include per diem and travel expenses.

In addition, the Civil Rights Act of 1991, which became effective on October 1, 1992, also authorizes either party to elect a jury trial or Alternative Dispute Resolution (ADR). If ADR is selected by either the complainant(s) or the agency, this would add another major cost increase to the activity. Mediators/ arbitrators are currently charging from $7,000 to $10,000 per case. Even if the Department contracted/hired ADR services, they would most likely charge RSPA for the costs.

RSPA has acquired an increase in program responsibilities. The increased level of activity in the civil rights area is expected to continue beyond FY 1994.

o EEO Counselor Training

A portion of the Civil Rights Program is the continuous updating of skills/knowledge of the EEO Counselors to provide better service to the employees we serve. (Training is required every two years for EEO Counselors.) In order to achieve this, counselors are encouraged to attend special emphasis programs and seminars to represent RSPA and its employees.

**ACCOMPLISHMENTS:**

The Office of Civil Rights continues to provide effective leadership in civil rights programs nationwide by developing and implementing innovative programs and guidance materials. We have presented a variety of programs in order to promote diversity and insure awareness of increasing female and minority representation. The percentage of women and minorities occupying GS-11 and higher positions has continued to increase. In addition, representation of minorities and females in non-traditional positions such as engineering continues to rise.

**PLANNED FOR FY 1995:**

RSPA will continue to review internal civil rights programs which affect the welfare of our employees. RSPA's civil rights responsibilities will increase to ensure compliance of Title VI, Title VII, the Civil Rights Act of 1991, and the requirements of other laws when disbursing the Federal financial assistance grants to qualified recipients.

## PROGRAM: CIVIL RIGHTS

**ACTIVITY (in thousands):** Drug Program

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 6 | 5 | 5 | 0 |

**PROBLEM STATEMENT:**

Contract costs associated with the day-to-day operation of the internal drug testing program, including lab fees and collectors fees, will continue to rise. RSPA employees must be provided with updated guidance and orientation concerning expansion and changes in the program. RSPA must maintain its leadership and credibility in this area by providing quality program execution.

**ACCOMPLISHMENTS:**

RSPA has established its internal program as one of the leading programs within the Department. RSPA has produced a variety of materials which have provided program guidance not only to employees, but to their families and communities. Our testing program is closely monitored, and the rights and privacy of the individuals involved with the program are zealously protected.

**PLANNED FOR FY 1995:**

RSPA will continue to provide guidance and orientation for all RSPA employees and applicants. Drug testing practices continue with the most recent additions and changes as adopted by the Department. RSPA employees must be regularly informed of these changes.

## PROGRAM: CIVIL RIGHTS

**ACTIVITY (in thousands):** Freedom of Information Act (FOIA) Support

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 0 | 0 | 65 | +65 |

**PROBLEM STATEMENT:**

This request is based on the fact that **FOIA requests have increased more than 234 percent from 1987 to 1992** (see following table). In 1990, RSPA processed 316 FOIAs and the 1993 projection is almost double that of 1990. The Office of Civil Rights is required by law to respond to FOIA requests within 10 workdays. The requirements for accountability and absolute accuracy demanded by FOIA regulations do not permit errors which have resulted from only one FOIA Officer working under such severe time constraints.

| Calendar Year | Total FOIAs Received | Yearly Percentage Increase Over Previous Year |
|---|---|---|
| 1987 | 141 | --- |
| 1988 | 244 | 73% |
| 1989 | 302 | 24% |
| 1990 | 316 | 5% |
| 1991 | 400 | 27% |
| 1992 | 471 | 18% |
| 1993 | *596 | *27% |
| 1994 | *757 | *27% |
| 1995 | *961 | *27% |

*Estimates based on available data.

Several factors account for the dramatic increase in FOIA requests -- (1) a large increase in hazardous materials and pipeline safety enforcement actions over the past several years, (2) increased awareness of the hazardous materials and pipeline safety databases, and (3) the increased numbers of enforcement cases pursued by the Chief Counsel's Office. In calendar year 1992 alone, over 300 requests (out of 471) came from law firms requesting data regarding enforcement activities. RSPA expects these factors to continue well beyond FY 1995, drastically increasing FOIA requests. The estimate for FY 1995 indicates that current staffing in the Office of Civil Rights will be physically unable to comply with FOIA requests for required by law. As of May 1993, there are approximately 50 FOIA requests outstanding.

**ACCOMPLISHMENTS:**

The Office of Civil Rights has used every method available to them to maintain currency with FOIA demands, including additional automation, and standardization of responses where possible, etc. Regrettably, other mission requirements (the Civil Rights Program and the Drug Program) have suffered because of the extensive efforts expended on FOIA.

**PLANNED FOR FY 1995:**

The FOIA backlog has been steadily increasing due to the amount of time it takes to review and process complex requests with the limited staff. A single complex request can take up to a week to review for FOIA Exemptions and Privacy Act implications. (This does not take into account the time that the program office takes in gathering the documents/records/data.)

The contractor is urgently needed to keep up with processing FOIA requests to the general public. The contract employee would -

- Review FOIA requests for content;
- Research all possible areas where information may be obtained;
- Maintain all necessary documentation related to each request, including careful documentation of files checked, conversation with field personnel, other offices, the requestor, etc.;
- Analyze all documents selected for a particular request;
- Cross check and analyze other related FOIA requests;
- Prepare interim replies;
- Prepare, modify, and coordinate responses in order to meet all regulatory requirements prior to release of documentation;
- Prepare responses to requestors issuing denials on Privacy Act issues;
- Prepare responses which make recommendations regarding FOIA Exemptions to the FOIA Officer for final approval and dissemination;

- Coordinate with Accounting and process FOIA fee collections and delinquent accounts.

**CONSEQUENCES OF NOT FUNDING**:

The FOIA workload precludes time for the Office of Civil Rights to fully accomplish its primary mission of Civil Rights. Currently, there is little time remaining to properly conduct the Internal Drug Program as well. The FOIA workload takes up approximately 90 percent of the Office of Civil Right's efforts leaving only about 10 percent to conduct the Civil Rights Program and to maintain the Drug Program.

Failure to adequately fund and staff these programs provides potential embarrassment and potential legal action against the agency. For example, RSPA has been recently sued over the mishandling of a FOIA request.

## PROGRAM: MANAGEMENT AND ADMINISTRATION

### POSITIONS

New: 0

No new positions are requested in FY 1995.

**ACTIVITY (in thousands):** Budget and Financial Reporting

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 28 | 28 | 28 | 0 |

### PROBLEM STATEMENT:

The Departmental Accounting and Financial Information System (DAFIS) allows only one terminal in RSPA to query and has limited reporting capability. In order for RSPA to use DAFIS as a financial management tool, senior management needs on-line access to accounting reports and financial queries.

### ACCOMPLISHMENTS:

Currently, RSPA maintains a budget reporting system, separate from DAFIS. We are proposing to reinforce our current reporting system through expansion of the DAFIS reporting capabilities.

### PLANNED FOR FY 1995:

A contractor will be used to develop specific financial reports and increase management's on-line query capability, two areas which are crucial to RSPA's ability to properly manage its financial operations. Other DOT Administrations have successfully used contractor support to develop on-line reports to meet specific agency requirements.

## PROGRAM: MANAGEMENT AND ADMINISTRATION

**ACTIVITY (in thousands):** Procurement Support Contract

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 0 | 0 | 75 | +75 |

**PROBLEM STATEMENT:**

- Backlog of 25 contracts and 1,350 purchase orders require an administrative closeout, payment and financial audit.
- Data Support Services are required to maintain an accurate and complete management information system.

**ACCOMPLISHMENT:**

Due to the increase of workload over the past four years, contract closeout and data information have been accomplished on an inadequate and very limited basis. Projected program increases will require this contract support essential to RSPA's operations.

**PLANNED FOR FY 1995:**

**Contract Closeout** - Contract closeout support is required for contracts in which performance has been completed and all deliverables and/or services received. Support will entail a review of all contracts prior to closeout to ensure all work has been completed and no monies are owed either to the contractor or to the Government. Support will also include marking and packaging closeout files in accordance with applicable government regulations for final submission to the National Archives.

**Data Support Administration** - Support would involve the use of data entry labor in order to provide assistance to the agency in meeting its contract data reporting requirements. The Office of Management and Budget (OMB) mandates the reporting of all federal procurements award data into the Federal Procurement Data System. In order to support OMB's guidelines of internal controls for procurement, it is necessary to improve RSPA's procurement tracking and the quality of reporting data. Additionally, this office is responsible for collecting and compiling detailed procurement data in response to over sixty (60) internal reports that must be submitted annually to the Office of the Secretary. Reports include: RSPA's Preference Program Achievements for Small and Disadvantaged Business concerns, woman owned businesses and labor surplus procurements which track our Agency's preference goals.

## CONSEQUENCES OF NOT FUNDING:

**Contract Closeout** - If timely contract closeout is not performed, then deobligation of contract funds cannot be processed. The OMB has targeted contract closeout for audit review. The OMB estimates Government-wide, that over one billion contract closeout dollars is owed to the government. In regards to untimely contract closeout, the following represents the liabilities to the Government:

- Congressional inquiries in response to contractors' requests for final payment under their contracts.
- Before final closeout, contractors may identify additional costs and submit claims against the Government.
- If contract closeout is not completed, interest charges may be incurred for delayed final invoice payment.
- Potential exists for double billing under old invoices.

In accordance with the Federal Acquisition Regulations, subsequent to contract closeout the Office of Contracts and Procurement is permitted to archive seven hundred (700) purchase orders. Currently, RSPA's office space is limited; archiving these files will significantly reduce storage space and costs.

**Data Support Administration** - An inadequate procurement reporting data system would not provide accurate or timely information to Congress, as required by law. Additionally, it would not support the Office of Federal Procurement Policy proposed policy to implement the recommendations contained in a June 1989 report to Congress on the Federal Procurement Data System and the April 1991 report of the President's Council on Integrity and Efficiency on application controls for Federal Contract Tracking Systems. Inadequate reporting would have further negative impact with respect to continued congressional approval of future program budget requests due to poor agency data reporting controls.

## PROGRAM: MANAGEMENT AND ADMINISTRATION

**ACTIVITY (in thousands):** Personnel Support Contract

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 0 | 0 | 50 | +50 |

**PROBLEM STATEMENT:**

Personnel Office staff shortages and the demands of providing day-to-day personnel operating services, preclude the current personnel staff from providing thorough analysis and documentation of complex classification, position management and employee relations issues/actions as required by law and OPM regulation. There is a rising backlog of required documentation and analysis in these areas that needs attention. As a result, RSPA is potentially vulnerable to being found in non-compliance with personnel law or regulations. As a result of either an external regulatory review (OPM or DOT Personnel Management Evaluation, GAO or Inspector General audits, etc.) or adversarial action that focuses external attention on these issues (employee grievances, classification appeals, MSPB appeals, EEO complaints, etc.) RSPA could be required to correct these deficiencies. In addition, the personnel staff cannot provide the full range of personnel program advice and assistance that should be expected. While the staff is fully competent to do so, if we are required to devote significant staff time to these issues, then other day-to-day services will suffer.

**ACCOMPLISHMENTS:**

The Personnel Office has achieved notable success in the recruiting area. We have expedited the recruitment process through a variety of innovative techniques. Recent feedback from line managers has been favorable with respect to turn-around time from initial recruitment requests to identification of candidates for interview and selection. All 25 Hazardous Materials Safety and Pipeline Safety FY-92/93 new positions plus a number of current vacancies were filled during the period of January 1992 through June 1993. Personnel has made extensive use of job fairs, Department of Defense referrals, and personal outreach efforts to locate applicants who can be direct hired, transferred, or reinstated directly to our vacancies. While OPM occupational job fairs are quite expensive, costing as much as $2,400, Personnel staff has joined with its sister DOT modes in assisting them with staffing their recruitment booths. Our cooperative efforts meant that we participated at a reduced cost or no cost to RSPA.

**PLANNED FOR FY 1995:**

RSPA proposes to contract with a reputable firm to provide seasoned personnel experts who will accomplish comprehensive position management/position classification audits, reviews, and supporting documentation. Additionally, the funds will enable RSPA to purchase software packages for personnel retirement programs. These funds will also enable RSPA to provide increased retirement counseling through the use of a reimbursable contract agreement with another DOT operating Administration.

RSPA plans to contract for support services which will conduct essential position management/classification surveys and audits, and will provide required documentation supporting the conclusions of these activities. Internal resources will be devoted to improve recruitment and selection processes, and personnel operations assistance (personnel orientation, personnel record maintenance, resolution of payroll or personnel problems, etc.).

- **Classification ($30K)**

  There is a critical need to conduct comprehensive position management/classification reviews including the provision of accurate position descriptions and evaluation statements, both of which are required by law and regulation. The purpose of these reviews will be to identify outstanding position classification, position management, and organizational issues and remedy any identified deficiencies. Issues that need attention include:

  - **ACCURATE POSITION DESCRIPTIONS.** There have been reorganizations in the past 5 years where the position descriptions have never been changed to reflect the new structure/duties/responsibilities.

  - **CLASSIFICATION ACCURACY.** Many positions have undergone substantial changes as a result of their absorption into RSPA from the Office of the Secretary (i.e., supervisory titled positions with no one to supervise).

  - **CLASSIFICATION STANDARDS IMPLEMENTATION.** New classification standards continue to be issued each year which require us to audit jobs and change position descriptions (for example, the new General Schedule Supervisory Guide and the more recent Grants Management Series classification standards will have to be implemented next year).

  - **SUPPORTING DOCUMENTATION.** Many RSPA positions do not have the proper evaluation statements as required by the Department. For example, supervisory positions, mixed series positions, and positions where the Classification Standards' grade level criteria are exceeded, all require evaluation statements.

- **BRIDGE DEVELOPMENTAL POSITIONS.** There is a need for bridge positions (technical positions at the GS-6/7/8/9 levels) for technical and clerical staff to transition to the administrative and professional ranks. This area needs to be studied for Upward Mobility, EEO and Work Force Diversity objectives.

It is virtually impossible to conduct the required analysis and reviews with the current Personnel Office staff levels. The immediate demands of providing personnel operating services prevent meaningful, accurate, and responsive advice to management on many of these issues. Many of these reviews and analyses are required by law and regulations. In addition, there is a need - to some extent a requirement - to advise senior management on optimum organization design, and to develop long-range plans for cost efficient organizational structures. Successful agency operations require that our Personnel Office practice sound position classification and position management.

o **Retirement Counseling (\$20K)**

RSPA needs to purchase retirement calculation software necessary to provide basic advice and assistance to employees interested in retirement information. A basic retirement calculation program will provide prospective retirees with information on basic annuities, disability benefits, survivor benefits, deposits and redeposits, and Thrift savings plan benefits. This is a minimum level of service that we must provide. The software is an efficient and reliable means for the personnel staff to provide this service.

In addition, if full retirement counseling service is going to be provided, it will need to be done through a reimbursable contract agreement with another Operating Administration in DOT. This is a basic personnel service that cannot be adequately addressed with the current RSPA personnel staff levels. It is anticipated that RSPA will need to counsel 10 - 15 persons each year and that the number will be increasing by 1995. An alternative to providing direct personal retirement counseling, may be purchasing information packages and contracting for pre-retirement seminars.

**CONSEQUENCES OF NOT FUNDING:**

Not funding the personnel support services requested will put RSPA in non-compliance with law and regulations. The RSPA headquarters Personnel Office is severely understaffed and new hiring has been constricted by the President's initiative to reduce Federal employment. Without the ability to handle critical regulatory functions in-house, it is absolutely necessary to contract for those services. Classification, retirement, employee counseling services, and personnel regulation advisory services are required program areas for all personnel offices. The incomplete classification documentation in RSPA opens the agency up to charges of regulatory non-compliance. An aging work force has increased the demands for retirement information and service. The funding requested will provide both a comprehensive and better organized retirement counseling service. Employee counseling services are provided for headquarters personnel through a reimbursable agreement with the Office of the Secretary. Unfortunately, the contract does not provide any response for employees located in RSPA's field offices nationwide. Maintaining a current and updated Personnel Manual through automated techniques will assure accurate personnel advice to RSPA managers and employees, a service the work force needs and deserves. Finally, participation in job fairs allows the agency to compete for the best talent in an extremely competitive market for highly specialized position vacancies.

## PROGRAM: MANAGEMENT AND ADMINISTRATION

**ACTIVITY (in thousands):** Information Resources Management

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 150 | 243 | 470 | +227 |

**PROBLEM STATEMENT:**

The IRM organization has attempted to fulfill its responsibilities, identified in RSPA's mission statement, of providing policy guidance and direction to the Agency's 300 users for application development, office automation, telecommunications, word processing, electronic mail, the sharing of data/information and IRM acquisition (including equipment, software, telecommunication) and the day-to-day user problem calls, but has fallen short due to lack of resources (positions and funds), as identified in the Office of the Secretary, Information Resource Management's (M-30) draft Over Sight and Review Program report. This report also strongly recommends an increase of IRM staff, consolidate related IRM functions, strengthen funding mechanisms, develop formal IRM policy, implement an IRM review program and develop a comprehensive strategic planning process to ensure satisfactory management of our major information systems and critical technology initiatives.

Information technology and automated systems are essential to the Agency's ongoing operations. To ensure the overall efficient and productive use of these resources, the IRM organization needs to be able to implement an information resources management policy for all such activities in the Agency. All offices require a high level of IRM/ADP/telecommunication support; our focus is on how limited resources can be best allocated in support of the Agency's mission and goals.

**ACCOMPLISHMENTS:**

The IRM organization completed an Agency-wide requirement analysis; this effort will serve as the Agency's Strategic IRM Plan. We identified 17 corporate IRM initiatives that when developed and implemented will increase the agency's productivity and its responsiveness to the public. We have successfully networked all offices within the Agency (providing easy access to commonly used software and ensuring regular back up of data), and have provided the field offices with a telecommunication link to Headquarters for electronic mail (E-mail) support. We initiated detailed functional requirements studies on two (imaging and a action tracking system) of the 17 systems that were identified in the requirement analyses perform last year. We have developed a plan that will migrate the Agency's network from 3-COM (3-COM announced over a year ago they will no longer support the 3-COM operating software) to MicroSoft's LAN Manager operating system. We have established a User Help Desk that trouble shoots Pcs and network problems for the user community, in addition to providing office automation, word processing and color graphic support. Installed Lotus Notes file server and an imaging document system as pilots to evaluate their benefits to the Agency. We developed several Agency tracking systems, including the Rulemaking Tracking system that is used by all program offices. We developed an Agency security plan, including Agency policy and awareness training.

**PLANNED FOR FY 1995:**

**Core Initiatives** FY 1994: $158,000 FY 1995: $302,000

- **Local Area Network (LAN)** FY 1994: $ 40,000
  FY 1995: $ 140,000

| ITEMS | FY-92 | FY-93 | INCRS | FY-94 | INCRS | FY-95 | INCRS |
|---|---|---|---|---|---|---|---|
| # OF USERS | 240 | 360 | 50% | 480 | 34% | 510 | 6% |
| # OF FILE SERVERS | 9 | 17 | 47% | 23 | 35% | 25 | 8% |
| NETWORK PROBLEM CALLS | 4210 | 5500 | 31% | 7500 | 36% | 8475 | 13% |

Local Area Networks (LANs), linking together the computers and automated systems serving RSPA Offices, provide an underlying basis that RSPA personnel need to use to more effectively accomplish the mission and goals of the Administrator. The IRM office is working with each of the Offices to ensure the design, installation and administration of the LAN meets their requirements.

The development of LANs that interface with other existing DOT and Federal data communications facilities will increase the timeliness of reporting information internally, to the Department and Federal offices, and to the public. The dollars will fund: one LAN administrator; one assistant LAN administrator; LAN hardware and software; RSPA LAN maintenance; RPSA's portion of the Departments fiber optic network that provides the operating administrations the capability to share and transfer information quickly and easily; and the electronic data interchange (EDI), which the Department is encouraging the Modes to use, will comply with the Office of Federal Procurement Policy (OFPP) efforts to monitor the EDI throughout the Federal Government with a single uniform system.

- **Application Development** FY 1994: $ 32,000
  FY 1995: $ 25,000

| ITEMS | FY-92 | FY-93 | INCR | FY-94 | INCR | FY-95 | INCR |
|---|---|---|---|---|---|---|---|
| DEVELOPMENT EFFORT | 26 | 35 | 35% | 42 | 16% | 47 | 12% |

Computer system applications can effectively facilitate many of the budgetary (eg. Departmental Accounting and Financial Information System (DAFIS) and RSPA's Accounting and Management Information System (RAMIS)), administrative (eg. Regulatory Tracking System, Correspondence Control System and Priority Planning Tracking System) and personnel (eg. forms generating system and Personnel Tracking System) activities performed by RSPA Offices. By automating these and many other processes, more timely sharing of information, more current management reports and greater internal quality controls can be obtained with marginal effort. The dollars will fund two application analyst contractors, for Agency development and programming support.

o **Information Support Center** FY 1994: $ 25,000
FY 1995: $ 27,000

| ITEMS | FY-92 | FY-93 | INCR | FY-94 | INCR | FY-95 | INCR |
|---|---|---|---|---|---|---|---|
| TROUBLE CALLS | 1050 | 1210 | 15% | 1290 | 7% | 1314 | 2% |
| HARDWARE & SOFTWARE EVALUATION | 910 | 1230 | 35% | 1410 | 15% | 1420 | 7% |
| GRAPHIC SUPPORT | 290 | 360 | 24% | 450 | 25% | 480 | 7% |
| OFFICE AUTOMATION TRAINING | 1460 | 1580 | 8% | 1670 | 6% | 1704 | 2% |
| DESK TOP PUBLISHING SUPPORT | 33 | 40 | 21% | 48 | 20% | 48 | 0% |
| COMPUTER MAINTENANCE | 1840 | 2070 | 12% | 2260 | 9% | 2100 | -7% |
| E-MAIL SUPPORT | 1206 | 1356 | 12% | 1511 | 11% | 1344 | -11% |
| IRM SUPPORT | 850 | 948 | 12% | 1130 | 19% | 1751 | 55% |

Providing a one-stop source of technical support to all RSPA computer users, the Information Support Center will increase RSPA personnel productivity. Able to diagnose and overcome all types of user problems, the Center personnel will be able to assist users who are experiencing hardware, software or telecommunications difficulties. The Center will provide user support and training for all microcomputer hardware, software, and communications purchased. The dollars will fund three micro computer program analyst contractors.

o **Hardware/Software** FY 1994: $ 0
FY 1995: $ 25,000

As new employees join RSPA and older systems become obsolete, new microcomputers need to be purchased. As new technology enables activities to be accomplished on microcomputers that formerly required mainframes or hardwired terminals, additional faster and/or smaller microcomputers become more cost-effective ways of performing these processes. To enable existing microcomputers to accomplish more functions, additional hardware such as auxiliary storage devices, extra random access memory and mice need to be evaluated, recommended and purchased.

| | |
|---|---|
| o **Equipment Maintenance/Cabling** | FY 1994: $ 0<br>FY 1995: $ 25,000 |

RSPA Headquarters offices now have over 300 microcomputers and associated peripherals, such as laser printers and tape storage systems, which must be maintained in useful condition. Maintenance includes having technical support capable of determining the cause of system failure, sources of replacement parts, and maintenance agreements to install replacement parts. Replacement parts for microcomputers and peripherals include everything from new cables and disk controllers to new cable connectors, from new disk drives to new video cards. As all of the computer machinery in RSPA is in constant use, items fail on an on-going basis, requiring maintenance considerations to be a continual activity.

| | |
|---|---|
| o **Supplies** | FY 1994: $ 0<br>FY 1995: $ 10,000 |

The 300 users of microcomputers and associated peripherals require a steady supply of materials. To store and retrieve files, users need diskettes and tape cartridges. To hold the diskettes, diskette holders need to be available. To print reports and presentations, users need printer paper and toner ink for the laser printers. When any of these supplies become unavailable, users' productivity falls dramatically. The appropriate sizes and types of these supplies need to be ordered and made available to RSPA microcomputer users throughout the year.

| | |
|---|---|
| o **IRM Training** | FY 1994: $ 0<br>FY 1995: $ 15,000 |

Training users on information systems increases their productivity in a pronounced fashion. Being mostly self-taught, RSPA users are often unaware of tips and simple ways of performing complex tasks. The basic office automation tools are word processing, file management, spreadsheets, database management, presentation graphics and electronic mail all require training in order for their best and most productive use.

Training activities include constructing or obtaining course outlines and examples, locating appropriate teachers/trainers, preparing or obtaining use of training facilities with computers and appropriate software packages, organizing classes and performing the training.

o **IRM Security** FY 1994: $ 61,000
FY 1995: $ 35,000

RSPA relies upon its automated information systems (AIS) for essential support in accomplishing mission objectives. Programs and functions which involve irreplaceable national resources rely heavily on the reliability and accessibility of these systems. The data/information and the hardware/software/communications assets are considered vital and must be protected.

RSPA is responsible for activities that affect the health and safety of the public sector and thus is subject to prosecution and audit should its assets be compromised or misused. The compromise and misuse of these assets can be minimized through appropriate security measures and controls.

Within RSPA there is integration of systems across mainframes, minicomputers, microcomputers and several networks, and it is difficult to separate out specific security issues for individual systems. Only a comprehensive integrated program that involves management/user responsibilities and commitment can ensure an effective, economical security posture for RSPA's AIS resources.

As computers become increasingly linked together, the need for planning, installing and administering information resource security measures becomes of highest importance. The work of RSPA personnel should remain secure until it has formally been released to the public. To insure such security on all RSPA computing resources, a formal security plan has to be adopted for the headquarters and the field offices. The production of an information resources security plan requires research into the applicability of security features, the level of security required for each office function, and the costs and benefits of various security applications.

An information resources security plan includes the formal statement of Agency policy combined with all manual and automated procedures that are to be adopted. Such procedures include providing password protection, encryption, and limitation of user access to only those systems, files and applications that are rightfully required for job performance.

**New Technology Initiatives** FY 1994: $35,000 FY 1995: $168,000

o **Imaging/Optical Disk Storage** FY 1994: $ 35,000
FY 1995: $ 98,000

Four offices (Office of Hazardous Material Safety, Office of Pipeline Safety, Office of Tariffs and Office of Aviation Information) have large docket files which are prime candidates for conversion to optical disk storage. Reasons for these selection are size, frequent access by multiple users in Headquarters and the field offices, other Department of Transportation Agencies, other

Government departments and the private sector, and the need to protect the integrity, security, and accuracy of a critical agency information systems. Imaging technology offers the capability to automate the storage, retrieval, and use of information by a wide range of users while protecting the integrity, security and accuracy of the files. This technology will be introduced in a fashion which promotes agency-wide integration and compatibility with other RSPA systems and the RSPA LAN.

By not taking advantage of imaging technology and optical disk storage, RSPA's offices (including field offices) will continue to require additional adjacent physical space for accessible storage of extensive but regulatory-critical documents (including the Freedom of Information Act (FOIA)). Funds will continue to be spent both for shelving, staffing and for the rooms where the material is stored and accessed. Stored in a database of optical images, the docket file information would be easier to maintain and manage, easier to search for technical details, and far smaller physically. By continuing the current paper intensive system, both government staff and the public suffer productivity losses while they continue to make multiple copies of lengthy documents, to incur conflicts when more than one person attempts to access the same document, and to require extensive literary search time to locate specific details of information. Also, an opportunity to reduce the paper volume and costs within the Agency will be lost.

| | | |
|---|---|---|
| o **Electronic Bulletin Board** | FY 1994: | $ 0 |
| | FY 1995: | $ 45,000 |

Electronic Bulletin Boards are an effective way to provide a variety of information and services to a diverse group of people. After gaining access to the Bulletin Board, users are able to select from a wide variety of topics, each with detailed information. Each user is assigned an "interest groups" to which related information will be flagged for their reading. Bulletin Boards also offer a "question and answer" forum on a various issues allowing users to input there comments, suggestions or offer their assistance. Updates to Agency developed software can also be downloaded from the Bulletin Board rather than mailing disk copies.

By not implementing electronic bulletin boards, RSPA staff will continue to lack access to one of office automation's primary productivity tools. Funds will continue to be spent for paper and for the people to prepare and distribute written memos. Placing information in easily accessible format enables both management and staff to produce more complete, more accurate and more timely products. By continuing the current manual system of sending memos either to everyone or only to selected ones, government staff throughout the Agency will not be able to take advantage of information that misses being sent to them, or of pursuing queries through non-traditional but conceivably very helpful sources.
Also, by not providing this forum, the Agency will continue to suffer from not distributing and disseminating information effectively and efficiently in a timely manner.

| | | | |
|---|---|---|---|
| o | **Agency Contract Tracking System** | FY 1994: | $ 0 |
| | | FY 1995: | $ 25,000 |

The agency needs a comprehensive contract information system which automates the entire procurement process, including procurement request (PR) tracking and reporting from initial receipt of PR through close out using an innovative and user friendly approach.

By not obtaining an agency contract tracking system, RSPA management will continue to lack total control over the procurement funds they spend. A comprehensive system would enable the easy compilation of executive oversight reports at all points through out the process, many of which are extremely difficult to capture manually. The current paper intensive system is relatively slow, cumbersome and unwieldy. Much of the information is transferred from one form to another, with the added risk of uncaught errors and omissions. By continuing the current fragmented process, RSPA will continue to have difficulties accounting for spending all authorized funds as appropriately and expeditiously as possible. RSPA will continue to be unable to capture and reuse unspent funds from ended contracts.

## PROGRAM: LEGAL SERVICES AND SUPPORT

### MISSION

The Office of the Chief Counsel provides legal services to the Administrator and agency managers to ensure the legal sufficiency and defensibility of their decisions, and to carry out their enforcement programs. Legal services are provided to support all aspects of the Research and Special Programs Administration's mission, with emphasis on hazardous materials and pipeline safety administrative enforcement and litigation, legislation, rulemaking, and general law. (Routine legal services are provided to the Volpe National Transportation Systems Center by its resident legal staff.)

### POSITIONS

New: 0

No new positions are requested in FY 1995.

## DEPARTMENT OF TRANSPORTATION
## RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION

### EMERGENCY PREPAREDNESS GRANTS

### (EMERGENCY PREPAREDNESS FUND)

For necessary expenses to carry out section 117A(i)(3)(B) of the Hazardous Materials Transportation Act, as amended, $400,000 to be derived from the Emergency Preparedness Fund, to remain available until expended: *Provided*, That not more than [$11,000,000] *$11,350,000* shall be made available for obligation in fiscal year [1994 for] *1995 from* amounts made available by section 117A(h)(6)(B) and (i)(1), (2) and (4) and 118 of the Hazardous Materials Transportation Act, as amended: *Provided further*, That such amounts shall only be made available to the Secretary of Transportation [and the National Institute of Environmental Health Sciences]. *(Department of Transportation and Related Agencies Appropriations Act, 1994.)*

### DEPARTMENT OF TRANSPORTATION
### RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION
### EMERGENCY PREPAREDNESS GRANTS

### UNAVAILABLE COLLECTIONS (in thousands of dollars)

Identification code 69-5282-0-2-407

| | | FY 1993 ACTUAL | FY 1994 ENACTED | FY 1995 REQUEST |
|---|---|---|---|---|
| 01.00 | Balance, start of year.......... | 2,821 | 1,371 | 5,480 |
| 02.00 | Receipts........................ | 9,550 | 15,000 | 15,000 |
| 04.00 | Total: Balances and collections.................... | 12,371 | 16,371 | 20,480 |
| 05.00 | Appropriation.................. | (11,000) | (10,892) | (11,750) |
| 07.00 | Balance, end of year........... | 1,371 | 5,480 | 8,730 |

### DEPARTMENT OF TRANSPORTATION
### RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION
### EMERGENCY PREPAREDNESS GRANTS

**PROGRAM AND FINANCING (in thousands of dollars)**

Identification code 69-5282-0-2-407

| | | FY 1993 ACTUAL | FY 1994 ENACTED | FY 1995 REQUEST |
|---|---|---|---|---|
| | Program by activities: | | | |
| | Direct program: | | | |
| 00.01 | Grants | 8,392 | 9,650 | 10,350 |
| 00.02 | Technical assistance | 400 | 400 | 400 |
| 00.03 | Administrative costs | 500 | 500 | 600 |
| 00.04 | Curriculum development | 650 | 450 | 400 |
| 00.05 | Emergency response guidebook | 500 | 200 | 0 |
| 00.06 | Transfer to other agencies | 0 | 250 | 0 |
| 10.00 | Total obligations | 10,442 | 11,450 | 11,750 |
| | Financing: | | | |
| 21.40 | Unobligated balance available, start of year (-) | | (558) | 0 |
| 24.40 | Unobligated balance available, end of year | 558 | 0 | 0 |
| 39.00 | Budget authority (gross) | 11,000 | 10,892 | 11,750 |
| | Budget authority: | | | |
| | Current: | | | |
| 40.20 | Appropriation (special fund) | 700 | 400 | 400 |
| 60.25 | Appropriation (special fund, definite) | 11,671 | 15,971 | 20,080 |
| 60.45 | Portion precluded from obligation | (1,371) | (5,480) | (8,730) |
| 63.00 | Appropriation (total) | 10,300 | 10,492 | 11,350 |
| | Relation of obligations to outlays: | | | |
| 71.00 | Total obligations | 10,442 | 11,450 | 11,750 |
| 72.40 | Obligated balance, start of year | | 9,803 | 9,314 |
| 74.40 | Obligated balance, end of year | (9,803) | (9,314) | (8,442) |
| 90.00 | Outlays | 638 | 11,939 | 12,622 |

### DEPARTMENT OF TRANSPORTATION
### RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION
### EMERGENCY PREPAREDNESS GRANTS

### OBJECT CLASSIFICATION (in thousands of dollars)

Identification code 69-5282-0-2-407

Direct Obligations:

| | | FY 1993 ACTUAL | FY 1994 ENACTED | FY 1995 REQUEST |
|---|---|---|---|---|
| 21.0 | Travel and transportation...... | 7 | 65 | 52 |
| 24.0 | Printing and reproduction...... | | 65 | 52 |
| 25.2 | Other services................. | 2,024 | 1,640 | 1,272 |
| 26.0 | Supplies and materials......... | 4 | | |
| 31.0 | Equipment...................... | 15 | 30 | 24 |
| 41.0 | Grants......................... | 8,392 | 9,650 | 10,350 |
| 99.0 | Total Obligations........... | 10,442 | 11,450 | 11,750 |

## EMERGENCY PREPAREDNESS GRANTS (EMERGENCY PREPAREDNESS FUND)

Grants, Monitoring and Technical Assistance,
Administrative Support, and Curriculum Development Programs
(in thousands of dollars)

### PERMANENT BUDGET AUTHORITY

| | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| Appropriation Limitation: | | | |
| Grants | 9650 | 10,350 | +700 |
| Monitoring/Technical Assistance | 400 | 400 | 0 |
| Administrative Support | 500 | 600 | +100 |
| Transfer to Other Agencies | 250 | 0 | -250 |
| Emergency Response Guidebook | 200 | 0 | -200 |
| Subtotal, Limitation | 11,000 | 11,350 | +350 |
| **APPROPRIATED BUDGET AUTHORITY** | | | |
| Training Curriculum | 400 | 400 | 0 |
| Total Request | 11,400 | 11,750 | 350 |

The Hazardous Materials Transportation Act (HMTA) requires the Research and Special Programs Administration (RSPA), through delegated authority from the Secretary of Transportation, to: (1) develop and implement a reimbursable emergency preparedness grant program; (2) monitor public sector emergency response training and planning and provide technical assistance to States, political subdivisions and Indian tribes; and (3) develop and update periodically a national training curriculum for emergency responders.

These activities are financed by receipts received from certain shippers and carriers who are required to register with the Department of Transportation (DOT) and to pay an annual fee which is placed in a special fund in the United States Treasury.

The HMTA authorizes up to **$17.915** million in permanent budget authority and **$1 million** in appropriated budget authority in support of the Emergency Preparedness Grant program. Budgetary resources for the Grant Program in FY 1995 total **$11.750 million**, including an appropriation limitation of $11,350. The limitation includes: **$4.04** million to States for planning grants and **$6.31** million to States and Indian tribes for training grants; **$400** thousand to provide monitoring and technical assistance; and **$600** thousand for administrative support.

$400 thousand is requested in appropriated funds (from the registration fee fund) for continued development of a training curriculum for public sector emergency response and preparedness teams.

## PUBLIC SECTOR PLANNING AND TRAINING GRANTS

### PROBLEM STATEMENT:

Grants are made to States for: developing, improving, and implementing emergency plans under the Emergency Planning and Community Right-To-Know Act of 1986, including determination of flow patterns of hazardous materials within a State and between a State and another State; and determining the need for regional hazardous materials emergency response teams. In addition, grants are made to States and Indian tribes for training public sector employees to respond to accidents and incidents involving hazardous materials.

The HMTA requires RSPA to maintain close coordination to implement the grant program and provide technical assistance with the Federal Emergency Management Agency (FEMA), the Nuclear Regulatory Commission (NRC), the Environmental Protection Agency (EPA), and the Departments of Labor (DOL), Energy (DOE), and Health and Human Services (HHS).

### ACCOMPLISHMENTS:

RSPA has established a Federal Interagency Coordination Group (ICG) and a DOT working group to implement the planning, training and curriculum development requirements of the HMTA. A final rule was published in September 1992. RSPA awarded grants in May 1993. Ninety-four percent of States and Territories have received grants.

### PLANNED FOR FY 1995:

RSPA anticipates the third round of grants will be awarded in FY 1995. RSPA is requesting a total of $10.350 million for the grant programs in FY 1995 ($4.04 million for the planning program and $6.31 million for the training program).

Grant program activities performed by RSPA include: receiving applications for grants; reviewing applications for technical compliance; approving, disapproving, or modifying grant awards; and any other ministerial function associated with the grant programs. RSPA is working closely with other Executive agencies to avoid duplication of effort. Providing grants to States and Indian tribes will significantly enhance hazardous materials planning and emergency response at all levels of government and in the private sector. In addition, the information gained from State planning efforts will vastly enhance the Federal, State and local governments' understanding of the magnitude of the transportation of hazardous materials. Useful data will also be obtained on the need for regional hazardous materials emergency response teams.

## MONITORING AND TECHNICAL ASSISTANCE

**PROBLEM STATEMENT:**

The HMTA requires FEMA, in coordination with DOT, EPA, DOE and the National Institute of Environmental Health Sciences (NIEHS) to monitor public sector emergency response training and planning for accidents and incidents involving hazardous materials. Taking into account the results of monitoring, these agencies are to provide technical assistance to States, and their political subdivisions, and Indian tribes for carrying out emergency response training and planning for accidents and incidents. The existing coordinating mechanisms of the National Response Team and, for radioactive materials, the Federal Radiological Preparedness Coordinating Committee are to be used in the provision of technical assistance.

**ACCOMPLISHMENTS:**

In addition to establishing a monitoring and technical assistance workgroup, RSPA has also planned a series of monitoring and technical assistance sessions where grantees will present program accomplishments and receive technical assistance from a team of Federal and nonfederal experts. These regional sessions will provide practical tailored assistance to the grantees and will provide DOT with valuable information.

**PLANNED FOR FY 1995:**

RSPA has established a monitoring workgroup and a technical assistance workgroup, led by FEMA and RSPA respectively, to develop criteria to evaluate the overall benefits and effectiveness of the planning and training programs and to determine what types or methods of Federal technical assistance would be most valuable in support of local hazardous materials planning and training programs. The information obtained from effective monitoring can then be used to provide technical assistance to grantees to strengthen all planning and training programs nationwide.

In FY 1995, RSPA will monitor and provide technical assistance to States, Indian tribes and local jurisdictions. RSPA will conduct program level monitoring by conducting field visits and reviewing progress reports to ensure that a level of quality is being met without duplication and overlap. RSPA will suggest program level corrective actions to grantees where necessary. In addition, it will identify those programs that work particularly well and use those data to strengthen the planning and training programs.

$400 thousand is requested for monitoring and technical assistance in FY 1995 as follows:

> $53 thousand will be used to support Local Emergency Planning Committee efforts by providing expertise and a transportation perspective to the planning process;

$53 thousand will be used to develop and provide to grantees computer software designed to provide aggregate commodity flow data;

$134 thousand will be used to conduct workshops on transportation-related concerns such as commodity flow resource management and hazard analysis;

$80 thousand will be used to support information sharing through regional monitoring and technical assistance sessions which will allow States to maximize resources by drawing on the experience of others and allow Federal Agencies to fulfill their monitoring and technical assistance responsibilities; and

$80 thousand will be used to develop and disseminate guidance, including successful practices and case studies, so that States with minimal resources can draw on the experiences of others and incorporate transportation risk into the planning process.

## ADMINISTRATIVE SUPPORT FOR PLANNING AND TRAINING GRANTS

Administrative support for HMTA grant programs is essential for an effective and efficient effort. Of the amounts made available for the programs in any fiscal year, up to an additional ten percent is available for administrative costs. An effective plan for providing administrative support follows.

**PROBLEM STATEMENT:**

Administrative support must be provided to sustain grants operations.

**PLANNED FOR FY 1995:**

RSPA requires $600 thousand to administer the grant programs. This amount will be transferred to the RSPA account and will be used as follows:

$52 thousand will be used to print notices and to prepare application kits for 60 to 100 potential grantees and 400 Indian tribes;

$24 thousand will be used to purchase computers and other equipment necessary for rapid and economical communication and record keeping to ensure fiscal accountability and administrative monitoring;

$52 thousand will be used for staff travel to assist States and Indian tribes to prepare grant applications and to resolve problems in program implementation;

**$64** thousand will be used to pay for the electronic transfer of funds to grantees via the Office of the Secretary/Federal Aviation Administration system.

**$408** thousand will be used to pay the PC&B of the Program Manager and staff who will perform grants-related tasks.

## TRAINING CURRICULUM DEVELOPMENT

### PROBLEM STATEMENT:

The HMTA requires the Secretary of Transportation to develop and update periodically, a curriculum necessary to train public sector emergency response and preparedness teams. This effort is coordinated with FEMA, NRC, EPA, DOL, DOE, HHS and NIEHS, using the existing mechanisms of the National Response Team and, for radioactive materials, the Federal Radiological Preparedness Coordinating Committee.

### ACCOMPLISHMENTS:

RSPA is funding development of a National Curriculum Program to ensure a set of accepted standards for hazardous materials training. The program will include curriculum guidelines, State generation of a national list of courses, support systems and model curricula. The second draft curriculum guidelines, available in November 1993, form a significant program milestone.

The curriculum guidelines address training requirements for response, planning, and prevention, and provide guidelines for additional quality control training management functions, such as course assessment, needs assessment, testing/evaluation, and instructor qualification and training. The national list of courses will be developed by aggregation of State self-assessment of programs using the curriculum guidelines. Quality focused support systems will be implemented to assist State and local hazardous materials training managers in the areas of course self-assessment, needs assessment, testing, evaluation, program development and peer exchange of exemplary programs. Model curricula will be developed as needed to address deficiencies in existing training as identified in the State course self-assessments. This development will be accomplished using teams of Federal, State, tribal and local training organization representatives.

### PLANNED FOR FY 1995:

The curriculum development program consists of four parts: first, the national curriculum guidelines will allow each State to self-assess and qualify its courses and training programs. Second, the national list of courses required by HMTA will be produced by aggregating State self-assessment of programs. Third, the curriculum support systems component of the program will be implemented to ensure: (1) that the curriculum is understood and used effectively; (2) that exemplary State programs are identified and exchanged among peer State training organizations; and, (3) that State peer review and dialogue is fostered to improve the quality of existing training. Fourth, model curricula and course materials will be prepared to help State and local training systems better address training requirements (especially in the area of planning and prevention) presently being unmet. Requirements are identified by comparing existing curricula against curriculum guidelines. The curriculum guidelines, national list of courses support systems and model curricula are being developed and maintained in a consensus process using diverse State, local and professional association experts. Using this process, the national curriculum will fulfill both the requirement for standardization (to ensure that all training meets minimum competency requirements), and the requirement for flexibility (to ensure that local hazard and response priorities and diverse training audience needs can be met at local levels). As authorized by Congress, this process must be on-going in order to effectively maintain relevance to changing State and local needs.

The national curriculum will include a summary of 50 State curricula which recognizes differences in States and the desire of the States to use existing courses as much as possible. The national curriculum will contain recommended courses of study for training public sector employees to respond to accidents and incidents involving the transportation of hazardous materials; for planning responses; recommended basic courses and hours of instruction; and appropriate emergency response training and planning programs developed under other Federal grant programs. The curriculum will provide guidelines for training to enable public sector employees to comply with the regulations issued by the Occupational Safety and Health Administration (OSHA) of DOL and EPA, and standards issued by the National Fire Protection Association. RSPA is required to consult with regional response teams and other persons who provide training for responding to hazardous materials incidents. RSPA is using the Federal interagency coordination group to ensure compliance with these extensive requirements. A recent analysis of State and local government emergency response capabilities indicated that only a small percentage of communities are adequately prepared to deal with hazardous materials transportation incidents. Establishing a national curriculum, based upon performance standards, will greatly assist responders in dealing with hazardous materials emergencies.

In FY 1995, RSPA requests an appropriation of $400,000 to be used as follows:

> $80 thousand will be used to update, revise, and publish the 1995 edition of the Guidelines for Public Sector Hazardous Materials Training and to produce a first edition of the national list and catalogue of courses.

**$90** thousand will be used to support State/tribal review of training effectiveness and to assist States/tribes in curriculum self-assessment.

**$20** thousand will be used to conduct national panel meetings on standardized student testing and on State and local training delivery evaluation.

**$110** thousand will be used to conduct seminars supporting State exchange/sharing of exemplary hazardous materials programs and courses. Support for exchange of programs will include instructor training and materials dissemination. A portion of these funds will be disbursed to other agencies involved in the curriculum development process to pay for their specific expertise which is not available elsewhere.

**$100** thousand will be used to develop model curriculum courses in planning and prevention to add key areas presently being missed in State and local curricula as identified against the national curriculum guidelines. Presently, most courses at the local level focus on response training. A major long term effect of the HMTA program will be raising the level of training in planning and prevention to that of response.

## DEPARTMENT OF TRANSPORTATION
## RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION

### PIPELINE SAFETY

### (PIPELINE SAFETY FUND)

For expenses necessary to conduct the functions of the pipeline safety program, for grants-in-aid to carry out a pipeline safety program, as authorized by section 5 of the Natural Gas Pipeline Safety Act of 1968 and the Hazardous Liquid Pipeline Safety Act of 1979, and to discharge the pipeline program responsibilities of the Oil Pollution Act of 1990, [$19,376,000] *$21,224,000*, of which [$2,449,000] *$2,685,000* shall be derived from the Oil Spill Liability Trust Fund, to remain available until expended; and of which [$16,927,000] *$18,539,000* shall be derived from the Pipeline Safety Fund, of which [$8,400,000] *$9,123,000* shall remain available until expended. *(Department of Transportation and Related Agencies Appropriations Act, 1994)*.

### DEPARTMENT OF TRANSPORTATION
### RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION
### PIPELINE SAFETY

### UNAVAILABLE COLLECTIONS (in thousands of dollars)

Identification code 69-5172-0-2-407

| | | FY 1993 ACTUAL | FY 1994 ENACTED | FY 1995 REQUEST |
|---|---|---|---|---|
| 01.00 | Balance, start of year.......... | 17,694 | 16,972 | 16,972 |
| 02.00 | Receipts........................ | 14,602 | 17,683 | 19,343 |
| | | ------ | ------ | ------ |
| 04.00 | Total: Balances and collections.................... | 32,296 | 34,655 | 36,315 |
| 05.00 | Pipeline safety................. | (15,050) | (16,927) | (18,539) |
| 05.00 | Rental payments................. | (481) | (576) | (619) |
| 05.00 | Research and special programs... | (175) | (180) | (185) |
| | | ------ | ------ | ------ |
| 05.99 | Total appropriations............ | (15,706) | (17,683) | (19,343) |
| 06.10 | Unobligated balance returned to receipts........... | 382 | | |
| | | ------ | ------ | ------ |
| 07.00 | Balance, end of year............ | 16,972 | 16,972 | 16,972 |

## DEPARTMENT OF TRANSPORTATION
## RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION
## PIPELINE SAFETY

### PROGRAM AND FINANCING (in thousands of dollars)

Identification code 69-5172-0-2-407

| | | FY 1993 ACTUAL | FY 1994 ENACTED | FY 1995 REQUEST |
|---|---|---|---|---|
| | Program by activities: | | | |
| | Direct program: | | | |
| 00.01 | Operations | 7,350 | 8,552 | 9,416 |
| 00.02 | Research and development | 572 | 1,352 | 1,123 |
| 00.03 | Grants | 6,983 | 7,570 | 8,000 |
| 00.91 | Total direct program | 14,905 | 17,474 | 18,539 |
| 01.01 | Reimbursable program | 440 | 2,525 | 2,710 |
| 10.00 | Total obligations | 15,345 | 19,999 | 21,249 |
| | Financing: | | | |
| 21.40 | Unobligated balance available, start of year (-) | (422) | (547) | |
| 24.40 | Unobligated balance available, end of year | 547 | | |
| 25.00 | Unobligated balance expiring | 20 | | |
| 39.00 | Budget authority (gross) | 15,490 | 19,452 | 21,249 |
| | Budget authority: | | | |
| | Current: | | | |
| 40.00 | Appropriation | 15,050 | 16,927 | 18,539 |
| 68.00 | Spending authority from offsetting collections | 440 | 2,525 | 2,710 |
| | Relation of obligations to outlays: | | | |
| 71.00 | Total obligations | 15,345 | 19,999 | 21,249 |
| 72.40 | Obligated balance, start of year | 7,342 | 8,316 | 10,484 |
| 74.40 | Obligated balance, end of year | (8,316) | (10,484) | (11,973) |
| 77.00 | Adjustments in expired accounts | (362) | | |
| 87.00 | Outlays (gross) | 14,009 | 17,831 | 19,760 |
| | Adjustment to budget authority and outlays: | | | |
| | Deductions for offsetting collections: | | | |
| 88.00 | Federal funds | (440) | (2,525) | (2,710) |
| 89.00 | Budget authority (net) | 15,050 | 16,927 | 18,539 |
| 90.00 | Outlays (net) | 13,569 | 15,306 | 17,050 |

### DEPARTMENT OF TRANSPORTATION
### RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION
### PIPELINE SAFETY

**OBJECT CLASSIFICATION (in thousands of dollars)**

Identification code 69-5172-0-2-407

Direct Obligations:

| | | FY 1993 ACTUAL | FY 1994 ENACTED | FY 1995 REQUEST |
|---|---|---|---|---|
| | Personnel Compensation: | | | |
| 11.1 | Full-time permanent | 3,196 | 3,817 | 4,163 |
| 11.5 | Other personnel compensation | 72 | 20 | 20 |
| 11.9 | Total personnel compensation | 3,268 | 3,837 | 4,183 |
| 12.1 | Civilian personnel benefits | 756 | 959 | 1,046 |
| 13.0 | Benefits for former personnel | 44 | | |
| 21.0 | Travel and transportation of persons | 506 | 551 | 551 |
| 22.0 | Transportation of things | 11 | 30 | 33 |
| 23.3 | Communications, utilities, and miscellaneous charges | 277 | 245 | 245 |
| 24.0 | Printing and reproduction | 55 | 55 | 60 |
| 25.2 | Other services | 2,650 | 4,127 | 4,323 |
| 26.0 | Supplies and materials | 33 | 40 | 38 |
| 31.0 | Equipment | 322 | 60 | 60 |
| 41.0 | Grants, subsidies, and contributions | 6,983 | 7,570 | 8,000 |
| 99.0 | Subtotal, direct obligations | 14,905 | 17,474 | 18,539 |
| 99.0 | Reimbursable obligations | 440 | 2,525 | 2,710 |
| 99.9 | Total obligations | 15,345 | 19,999 | 21,249 |

### DEPARTMENT OF TRANSPORTATION
### RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION
### TRUST FUND SHARE OF PIPELINE SAFETY

**PROGRAM AND FINANCING (in thousands of dollars)**

Identification code 69-8121-0-7-407

| | | FY 1993 ACTUAL | FY 1994 ENACTED | FY 1995 REQUEST |
|---|---|---|---|---|
| | Program by activities: | | | |
| | Direct program: | | | |
| 10.00 | Total obligations.................... | -- | 2,449 | 2,685 |
| | Budget authority: | | | |
| | Current: | | | |
| 40.00 | Appropriation.......................... | -- | 2,449 | 2,685 |
| | Relation of obligations to outlays: | | | |
| 71.00 | Total obligations...................... | -- | 2,449 | 2,685 |
| 90.00 | Outlays ................................ | -- | 2,449 | 2,685 |

## DEPARTMENT OF TRANSPORTATION
## RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION
## TRUST FUND SHARE OF PIPELINE SAFETY

### OBJECT CLASSIFICATION (in thousands of dollars)

Identification code 69-8121-0-7-407

Direct Obligations:

| | | FY 1993 ACTUAL | FY 1994 ENACTED | FY 1995 REQUEST |
|---|---|---|---|---|
| | Personnel Compensation: | | | |
| 21.0 | Travel and transportation of persons.................... | | 20 | 20 |
| 24.0 | Printing and reproduction...... | | 5 | 5 |
| 25.1 | Consulting services............ | | 2,410 | 2,526 |
| 25.2 | Other services................. | | | 120 |
| 31.0 | Equipment...................... | | 14 | 14 |
| 99.9 | Total Obligations............ | -- | 2,449 | 2,685 |

## RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION

### Summary of Requirements - Budget Authority

### PIPELINE SAFETY

| | FY 1994 Enacted | FY 1995 Request |
|---|---|---|
| Full Time Permanent (FTP) Positions | 72 | 75 |
| Full Time Equivalent (FTE) Workyears | 72 | 75 |
| ($000) | | |
| Personnel Compensation and Benefits (PC&B) | | |
| Derived from Pipeline Safety Fund | 4,660 | 5,109 |
| Derived from Oil Pollution Trust Fund | 136 | 120 |
| Operating Expenses | | |
| Derived from Pipeline Safety Fund | 2,034 | 1,959 |
| Derived from Oil Pollution Trust Fund | 45 | 45 |
| Total Contract Programs | 1,858 | 2,348 |
| Breakdown of programs: | | |
| Information Systems | 402 | 752 |
| Risk Assessment & Tech Studies | 355 | 250 |
| Compliance | 76 | 375 |
| Training & Info. Dissemination | 925 | 871 |
| Emergency Notification | 100 | 100 |
| Implementation of Oil Pollution Act | 2,268 | 2,520 |
| Research and Development | 875 | 1,123 |
| Grants | 7,500 | 8,000 |
| | 19,376 | 21,224 |

## APPROPRIATION SUMMARY
## PIPELINE SAFETY
## EXPLANATION OF ADMINISTRATIVE EXPENSE INCREASES
(in thousands of dollars)

### Total Personnel Compensation $5,229 +417

Based on an analysis of FY 1994 pay data, we have utilized a refined pay model to accurately project our needs for FY 1995.

#### FY 1995 Raise +68

The requested increase is to fund a 1.6 percent pay raise beginning in January, 1995.

#### Locality Pay +52

The requested increase is to annualize the locality pay authorized in FY 1994.

#### Within-Grade Increases +137

Increases include costs associated with mandatory increases required for those employees who have met the required criteria.

#### New Positions +170

The requested increase will provide salaries and benefits for three new positions.

### Operating Expenses $2,004 -75

#### Establish Alaska District Office

OPS proposes to establish a District Office in Anchorage operating under the supervision of the Western Regional Office in Denver. The office would be responsible for all natural gas and hazardous liquid pipelines in Alaska, enabling the Western Region to provide more direct oversight of Alaska pipeline operations, while significantly lowering travel costs. The potential consequences of pipeline spills in the fragile Alaskan environment are magnified by the difficulty of responding under what are oftentimes harsh climatic conditions. An emphasis on pipeline spill prevention, ensured by an enhanced OPS presence, is therefore especially important in Alaska.

OPS is responsible for overseeing 34 inspection units in Alaska. These include 2,000 miles of gas distribution lines serving 80,000 customers, 338 miles of gas transmission lines, and 2,000 miles of hazardous liquid lines. By FY 1995, OPS will be responsible for overseeing additional pipeline units, based on potential construction, documented new oil and gas discoveries, and impending regulation of low-stress lines.

The Trans-Alaska Pipeline System (TAPS), operated by the Alyeska Pipeline Service Company, comprises less than 15 percent of Alaska inspection units, but consistently requires more OPS oversight than any other pipeline in the Nation. The long-term safe operation and integrity of TAPS are crucial to ensuring the continuity of the domestic oil supply. The 800-mile long, 48-inch diameter pipeline transports approximately 25 percent of all domestically-produced crude oil. Corrosion discoveries on TAPS, safety-related allegations by former Alyeska employees, and a GAO audit recommending increased scrutiny and coordination by regulatory agencies have compelled OPS to enhance its oversight of TAPS.

In 1990, OPS permanently assigned one inspector from the Western Regional Office to Alaska for oversight of Alaskan pipelines. OPS also has participated in the Joint Pipeline Office Corrosion Task Force, comprised of OPS and other state and Federal agencies that oversee TAPS. In 1993, TAPS issues so dominated the inspector's time that support from the Western Regional Office and OPS headquarters exceeded an additional FTE. Significant time and funds were absorbed in travel between the continental U.S. and Alaska. Furthermore, other Alaska inspection units were neglected. The inspection backlog will not correct itself as long as TAPS requires such close oversight, and potential construction of new pipelines in Alaska continues.

| | | |
|---|---|---|
| Travel and Transportation | $604 | +3 |

The requested increase includes costs for additional compliance/inspection and state liaison activities. Compliance/inspection and state liaison employees travel approximately 50 percent of the time.

The base request also includes travel pertaining to OPA. These funds will be disbursed from the OPA Trust Fund ($20K).

| | | |
|---|---|---|
| Working Capital Fund | $898 | -131 |

Our request reflects the Office of the Secretary's WCF budget estimate for FY 1995.

| | | |
|---|---|---|
| Communications, Utilities & Miscellaneous | $245 | 0 |

The request is needed to cover costs associated with communications, utilities, and miscellaneous charges not covered under the working capital fund. These charges include: local phone charges; long-distance phone calls made under C&P or AT&T; workers compensation; etc.

Printing $65 +5

The request is required to cover the continuing costs associated with printing of required rulemakings and reports.

The base request includes $5 thousand for OPA technical reports. OPA funds will be disbursed from the OPA Trust Fund.

Training $29 -1

This decrease reflects an effort to reduce administrative costs where practical.

The base request includes $6 thousand for specialized training to enhance response expertise for OPS staff relating to OPA. OPA funds will be disbursed from the OPA Trust Fund.

Accounting $51 +51

The request represents Pipeline Safety's prorated cost of RSPA accounting services contracted through the FAA. The total RSPA cost for Accounting services is $189 thousand, which is a $10 thousand decrease from FY 1994. Funding for this activity appeared as a Contract Program under RSP in FY 1994.

Supplies & Materials $38 -2

The decrease reflects an effort to reduce administrative costs where practical.

Equipment $74 0

The amount is necessary in order to maintain and enhance current equipment.

The base request includes $14 thousand for specialized computer equipment which will enhance storage capacity for OPA mapping requirements. OPA funds will be disbursed from the OPA Trust Fund.

## PIPELINE SAFETY
## FY 1995 BUDGET REQUEST

### MISSION

> **"To protect the people and the environment of the United States through a comprehensive pipeline safety program that includes effective risk management, thorough pipeline compliance, high quality training and a strong, balanced federal/state partnership."**

RSPA's Office of Pipeline Safety (OPS) oversees the safe transportation of natural gas to 55 million residential and commercial customers, and the environmentally sound transportation of 25 percent of the nation's intercity freight, more than 605 billion ton miles of petroleum and other hazardous materials by pipeline. Our pipeline safety jurisdiction covers more than 2,000 gas pipeline operators with over 1.6 million miles of pipeline, and more than 200 operators and 165,000 miles of pipelines which transport hazardous liquids.

The pipeline safety program is authorized under the Natural Gas Pipeline Safety Act of 1968 (NGPSA) and the Hazardous Liquid Pipeline Safety Act of 1979 (HLPSA). Reauthorization of these statutes in the Pipeline Safety Act of 1992 (PSA 92) put protection of the environment on par with safety.

Following enactment of the Oil Pollution Act of 1990 (OPA), the Department redelegated responsibility for spill prevention and containment of oil and hazardous substances from pipelines to the Research and Special Programs Administration (RSPA). These responsibilities, defined under the Federal Water Pollution Control Act, also expanded the role of RSPA in environmental protection, and covered categories of pipelines previously excepted by the HLPSA or regulations adopted thereunder. The assessment and collection of annual user fees from the pipeline industry funds the basic pipeline safety program, and funds from the Oil Liability Trust Fund support OPA activities.

The FY 1995 budget request seeks to implement the prioritized recommendations resulting from the initial execution of OPS's risk assessment process. This process has been implemented with the participation of stakeholders, including, for the first time, environmental interest groups. Dramatic changes are occurring in the pipeline program as RSPA seeks and directs resources to new initiatives, particularly in research and development and compliance initiatives, which are essential to cost effectively deliver oversight of a nationally uniform program.

The budget request reflects environmental concerns identified by the Secretary of Transportation in his review of the program following a significant oil spill in Fairfax County, Virginia. Further, in addressing the mandates of the PSA 92, considerable emphasis has been placed on the hazardous liquid pipeline infrastructure and the development of a comprehensive data base needed to support many risk management and compliance initiatives. Leverage of state program resources has become increasingly critical to the delivery of an effective pipeline safety program. An increase in funding is sought to bring more states into the hazardous liquid program.

The pipeline safety program consists of the following functional areas:

**INFORMATION AND ANALYSIS** - Implements redesigned organizational structures and work processes. Collects, maintains, and assesses pipeline data to establish risk reduction priorities, identify trends, evaluate program effectiveness, and provide statistical support for federal and state pipeline safety initiatives.

**RISK ASSESSMENT & TECHNICAL STUDIES** - Previously called "Rulemaking", this function has been renamed to reflect RSPA's initiative to explore all potential solutions (not merely rulemaking) for assuring safety and environmental protection. Identifies and develops measures to address the risks inherent in the transportation of natural gas, including associated liquefied natural gas facilities, hazardous liquids, and carbon dioxide by pipeline.

**COMPLIANCE** - Carries out a national program to assure the safe operation of pipeline facilities to protect and preserve life, property, and the environment. This is achieved through planning and management of a risk based program of inspection and investigation, including oversight of state programs and increasing financial and technical assistance to states based on performance criteria. OPS will begin to contract for technical services in witnessing remedial tests following inspections and accident investigations and for witnessing new construction. Another initiative will be development of positive qualitative measures of operator performance as well. Many other program elements support our goal of attaining increased compliance.

**TRAINING AND INFORMATION DISSEMINATION** - Provides formal training: to promote compliance with pipeline safety regulations; to familiarize industry personnel, particularly operators of small gas systems, with the requirements of the regulations; and to educate federal and state inspectors in compliance requirements, inspection techniques, and enforcement procedures.

**EMERGENCY NOTIFICATION** - Provides for a system of emergency notification of incidents involving the transportation of gas and hazardous liquids by pipeline, and information for federal, state, and local emergency responders and the public on the location and contents of pipeline facilities and operations.

**IMPLEMENTATION OF THE OIL POLLUTION ACT (OPA)** - Comprehensive legislation (P.L. 101-380) amends the Federal Water Pollution

Control Act, among other purposes, to minimize the environmental impact of oil spills and to improve public and private sector response capabilities. OPS is implementing the mandates of OPA 90 applicable to onshore pipelines through operator plan review, exercises, coordination with regional and state response activities, and building a geographic-based information system on environmentally sensitive areas.

## POSITIONS

**New: 3**

**Compliance Program** - Three (3) positions are requested to support inspection and compliance activities, focusing on newly regulated low stress pipelines.

RSPA is requesting three positions with engineering and other technical skills to perform and support standard, follow-up, drug, and construction inspections of pipeline operators. In addition to their inspection duties, OPS inspectors respond to complaints from the public concerning pipeline operations, and conduct accident investigations.

These three new positions are requested to begin providing needed resources to inspect and bring into compliance approximately 2,000 additional hazardous liquid pipeline inspection units (8,600 miles) subject to regulation as a result of RSPA's implementation of PSA 92. These new units include low stress pipelines and gathering lines in environmentally sensitive areas such as the Florida Everglades (e.g., navigable waterways, public water intakes, and nature reserves) and areas with high population density. Leakage from these low-pressure pipelines can be a source of major pollution as illustrated by the Exxon 500,000 gallon heating oil spill into the Arthur Kill waterway in the New York/New Jersey area in 1989. The Secretary's environmental program review of the pipeline safety program identified the need for increased oversight of hazardous liquid pipelines reflecting growing public concern over the consequences of spills from these pipelines.

Funding these positions will achieve the following results:

- Provide the capability to initiate a program for the inspection of the additional 2,000 low-stress liquid pipeline units (state jurisdiction - 1230 and Federal jurisdiction - 670).

- Provide for a greater number of inspections of new construction. This will help prevent future pipeline accidents by ensuring that pipelines are properly welded, coated to prevent corrosion, tested, and are not damaged during backfilling operations. Relevant experience demonstrates that even new pipelines fail due to poor construction practices.

RSPA projects that the impacts of additional units coming under regulation will include: an increase over a three-year period of approximately 2,225 telephonic and written accident reports to be reviewed and acted on by inspectors, and an increase in 1994 to 60 public complaints and accident investigations (one accident investigation in Northern Virginia required more than 200 person days of field time in FY 1993) -- RSPA's top investigative priority. RSPA will continue to prioritize inspection schedules by using the risk assessment model.

INSPECTOR WORKLOAD INDICATORS

| | 1991 | 1992 | * 1993 | * 1994 | * 1995 |
|---|---|---|---|---|---|
| Telephonic Reports | 2584 | 3434 | 3457 | 3851 | 4155 |
| 30 Day Liquid Reports | 216 | 225 | 250 | 400 | 450 |
| Investigations | 32 | 48 | 55 | 60 | 60 |
| Compliance Actions | 119 | 148 | 160 | 185 | 195 |
| Hearings | 14 | 23 | 28 | 35 | 40 |
| FOIA | 157 | 199 | 204 | 225 | 250 |
| Standard Inspections | 233 | 344 | 390 | 460 | 540 |
| Pipeline Units | 1294 | 1294 | 1964 | 1964 | 1964 |

* Estimated based on available data.

**USE OF EXISTING POSITIONS AS STATE LIAISON POSITIONS (not a request for new positions)**

The FY 1993 Senate Report (102-351) acknowledged the role of State Liaison staff in leveraging the compliance responsibilities of the states for both the hazardous liquid and gas programs. We propose to utilize a State Liason position in each of the five Pipeline Safety field offices to perform more comprehensive, qualitative review of state programs needed, and to assure that grants are being managed to maximize performance.

Following the Secretary's environmental review of the pipeline safety program, state liaisons began working with state agencies not currently participating to bring them into the hazardous liquid program. State liaison positions have also facilitated state adoption of Federal requirements, provided program advice and technical guidance, assured adequate monitoring of state programs, and encouraged program development and adjustments within individual states to achieve a nationally uniform program to the degree feasible. Attaining national uniformity has benefitted industry by limiting variations in operational requirements and compliance policy, thereby reducing the cost of compliance.

State liaisons have been particularly active in working with states to adopt the eight minimum Federal requirements for one-call notification systems. One-call systems serve as message relay centers for excavators to notify pipeline and other underground facility operators of the intent to dig in the vicinity of their facilities. The systems have been an effective deterrent to excavation damage, which has been the leading cause of pipeline accidents. Among the program targets for the near future:

- Seven states which do not have one-call legislation,
- Nineteen states which have legislation, but do not have mandatory membership.
- At least 30 states which do not have the statutorily mandated level of civil penalty authority, critical in instances where pipeline operators, excavators, and one-call notification centers violate applicable requirements.

## PROGRAM: INFORMATION AND ANALYSIS

**ACTIVITY** (in thousands): INFORMATION SYSTEMS

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 402 | 402 | 752 | +350 |

**PROBLEM STATEMENT:**

RSPA's pipeline safety program is confronted with a rapidly increasing workload and a shift in its statutory and programmatic mission from an emphasis solely on safety to one that includes an equal emphasis on environmental protection. Additionally, RSPA's management of the program is in transition. It is a program goal by FY 1995 to manage the program, including allocation of resources, on the basis of comprehensive risk assessment. In order to fully evaluate consequence of incidents and benefits of proposed program solutions, information systems must be improved.

As to workload, RSPA's pipeline safety staff of approximately 65 employees is, on an annual basis, addressing over 200 requests for data summaries and reports under the Freedom of Information Act, 34 open NTSB safety recommendations, approximately 150 newly opened compliance progress files, over 300 standard operator inspections, 40 accident investigations, 11 public complaint investigations, over 30 rulemakings and studies, 60 state gas and liquid program reviews, 60 state certifications/agreements, and 58 state grant applications.

Further, additional data for OPA operator response plans and the Drug/Alcohol Management Information System and an increasing staff use of information systems for data analysis and program management add to the need for expansion of information systems capabilities to cope with this workload and to enable the staff to perform their jobs to the fullest potential. Additionally, responses to Congressional and public inquiries average 25 a month.

To fully develop the risk assessment model, information systems must be sophisticated enough to support the range of analyses used in consequence, probability and cost computations. As long ago as the Secretary's 1989 Safety Review Task Force, and the 1991 studies by the General Accounting Office and the Congressional Office of Technology Assessment, oversight officials have reviewed RSPA's information systems and have emphasized the need for system improvements, particularly in the areas of data type, reliability, timeliness, and accessibility. A comprehensive approach to improving the entire infrastructure of information systems continues with the implementation of additional system capabilities proposed by the OPS work redesign initiative.

**ACCOMPLISHMENTS:**

The IPIS, the Integrated Pipeline Information System, is the primary tool for storing, retrieving, and analyzing pipeline safety data. It encompasses nine original data bases, plus an additional four data bases which evolved out of work redesign, the Oil Pollution Act, and Drug/Alcohol Management Information System initiatives. Seven of the original nine data bases, showing FY 1993 workload indicators and expected increases in FY 1995, reflecting the addition of previously unregulated hazardous liquid pipelines, follow:

| | *FY 1993 | *FY 1995 |
|---|---|---|
| Annual reports | 2,700 | 3,000 |
| Accident reports | 275 | 450 |
| Telephonic reports | 2,500 | 4,500 |
| Safety-related condition reports | 480 | 600 |
| Operator inspections data | 425 | 600 |
| Compliance data | 75 | 150 |
| User fee data | 1,500 | 1,700 |

* Projections based on available information

RSPA has improved access to these data bases to make information more readily available to staff and other interested parties (e.g., Congress, state officials, FOIA requesters, and industry). State agencies have been given access to data on the IPIS system via remote computer dial-in. To date, 23 state offices have begun accessing the data, requiring additional program support from RSPA's IRM staff. NTSB and FERC have also been given dial-in access to IPIS.

The proper use of customized, interactive software in conjunction with the Lotus Notes application will, by FY 1994, tie the Regional offices to headquarters electronically, allowing access to common data bases via a wide area network. Data bases located at RSPA Headquarters in Washington, DC, will be able to be replicated in each Regional office.

The following additional data bases will be on line in FY 1994:

- **Office Management Information System (OMIS)** centralizes access to tracking systems and creates electronic office filing systems.
- **Regional Information System and Local Area Network (REGIS)** increases communications among regions and between headquarters and regions [will be in place in all five regions in FY 1994].

- **OPA Response Plan data base** allows tracking of response plans through the data entry and revision phases and provides a record of response plan exercises. Quick retrieval of response plan data during accidents will also be a benefit.

- **Drug/Alcohol Management Information System** provides RSPA with data needed to make management and regulatory decisions concerning drug/alcohol regulation.

- **Risk Based Planning Computer Model** provides RSPA with a means for prioritizing OPS tasks based on available cost and accident data and through a polling process involving public, industry and Federal expertise.

**PLANNED FOR FY 1995:**

RSPA's data contractor provides data entry, data retrieval, system development, and system maintenance support for operating the pipeline safety information system. Specific system improvements are identified, directed, and monitored by RSPA, and are carried out by the contractor. Much of the data resides on the Vax at the Volpe National Transportation Systems Center (VNTSC) in System 1032 data base formats. VNTSC continues to provide system analysis support for developing work redesign-related data bases.

- In FY 1995, REGIS should be in place in all Regional Offices, providing all staff access to Lotus Notes and other information systems. This expansion would greatly enhance decentralized decisionmaking capabilities and responsibility in the regions while at the same time allowing headquarters to tap into the skills available in the Regions. Hardware and software will be purchased to upgrade existing systems and enhance access to the system for the largely mobile region staff by providing additional notebook computers. These are needed to replace existing laptops with computers that are capable of running Microsoft Windows and Lotus Notes.

- RSPA will continue development and support of the OPA data base, the Drug/Alcohol MIS, and the Risk Based Planning Computer Model.

- Maintenance will continue on all nine original data bases and OMIS to ensure collection and analysis of pipeline safety data to support regulatory initiatives and compliance policies and meet all mandated reporting requirements.

- Software and hardware enhancements and communication upgrades will be introduced to: (1) further development of the annual report data base to incorporate hazardous liquid reports; (2) expand use of gas statistics mandated by the 1988 Pipeline Safety Reauthorization Act; and (3) expand use of data on new hazardous liquid pipelines in environmentally sensitive areas, and low stress pipelines.

- Additional effort is planned in data validation and systems consolidation as well as PC-based data, and data conversion from various sources into PC-based forms; office automation support for existing hardware/software; data analysis support to assess data commonality from external sources (EPA, Coast Guard, FERC, State programs, etc.) statistically analyze safety trends in existing data, and retrieve data from proposed new data bases (OPA, GIS, Liquid Operators, Drug and Alcohol Operator statistics.
- Provide assistance to states in accessing OPS information systems through the OPS Vax in Cambridge, MA, the LAN for E-Mail and Lotus Notes systems at RSPA Headquarters, and to provide training in the use of HMIS systems, E-Mail, and Lotus Notes.
- Improve access to VAX and other remote computers by purchasing high speed modems.
- Acquire high-speed printer for increased output of documents based on increased workload.
- Upgrade existing software to latest versions (Wordperfect, DOS, Lotus Notes).

**CONSEQUENCES OF NOT FUNDING:**

Funding at the requested level is necessary to assure the continued progress of the Risk Assessment Planning (RAP) initiative. The inability to adequately administer IPIS would compromise the application, reliability and accuracy of existing data. Consequently, there would be no solid analytical basis to support safety studies, reports, and regulations; identify emerging trends that may signal a threat to public safety or the environment; meet Congressionally mandated reporting requirements; be responsive to requests from Congress, the public, interest groups, and the media for risk-based data; handle the increasing demand for data under the Freedom of Information Act; and efficiently carry out pipeline safety user fee assessment and grants management.

Regional staff responding to pipeline emergencies need quick access to critical safety data. The additional workload from OPA and Drug/Alcohol regulations would weaken existing resources without additional support. The momentum of decentralization would be lost without access to the RSPA LAN and Lotus Notes.

## PROGRAM: RISK ASSESSMENT AND TECHNICAL STUDIES

**ACTIVITY** (in thousands): REGULATORY ANALYSIS, DEVELOPMENT, AND DISSEMINATION

**Note:** This Activity was titled "Advisory Committee and Publication Support" in FY 94

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 130 | 130 | 130 | 0 |

**PROBLEM STATEMENT:**

RSPA resources are not adequate to carry out all the required analyses, particularly for significant rulemakings, and outside help must be obtained, usually from the Volpe National Transportation Systems Center. This activity covers various regulatory requirements, specifically:

- OPS is required to analyze the economic consequences of a rule in relation to alternative actions.
- The Regulatory Flexibility Act requires assessment of the effect of a rule on small entities.
- The effect on states and federal/state relations must be determined under E.O. 12612.
- If a rule involves information collection, an estimate of burden-hours and costs and a justification must be prepared for OMB approval under the Paperwork Reduction Act of 1980.
- Under the National Environmental Policy Act, many rules must be evaluated to determine their impact on the environment.

Support activities are essential throughout the regulatory process to ensure that the public's concern for safety and environmental protection is adequately addressed and that the pipeline industry is not unduly burdened with unnecessary regulations. The following activities are separate from research and development activities, which have a different focus and require different skills to accomplish:

- RSPA's two statutory Advisory Committees must review proposed rulemakings for technical feasibility, reasonableness, and practicability.

- In addition, the public is given opportunity to comment on proposed rulemaking actions. This requires publishing all proposed and final actions, waivers, and other regulatory actions in the Federal Register, maintaining a public docket section.
- Annually, the applicable parts of the Code of Federal Regulations (CFR) are published.

**ACCOMPLISHMENTS:**

RSPA's Advisory Committees have reviewed proposed rulemakings for technical feasibility, reasonableness, and practicability. In addition, RSPA has used the Advisory Committees as a sounding board for discussing policy matters and emerging pipeline safety issues. This role is consistent with provisions of the PSA 92.

RSPA publishes all rulemaking actions, approved and denied requests for waivers, advisory bulletins, public meetings, memorandums of understanding, and Advisory Committee charters and meeting notices in the Federal Register. In addition, RSPA annually republishes Title 49, parts 190 through 199, of the CFR.

**PLANNED FOR FY 1995:**

During FY 1995, regulatory analyses will be required to support a range of regulatory actions.

- OPS will conduct analyses pertaining to the inspection, maintenance, and test requirements for emergency flow restricting devices and leak detection systems, check valves, gathering lines, and underwater abandoned pipeline facilities.
- The Advisory Committees will play an increasingly important role in prioritizing pipeline safety and environmental issues based on risk. In addition, the Advisory Committees will be polled in the various alternatives available to meet the mandates of the PSA 92.
- OPS will also hold round table discussions with industry, state leaders, special interest groups, and environmental organizations pertaining to specific issues or solutions generated in the risk assessment process. The meetings of the Committees and other groups of experts will serve as a major resource in developing a strategic plan to provide direction to the pipeline safety program for the immediate future.
- Support tasks include recording meetings, publishing notices of meetings and preparing supportive analyses.

## PROGRAM: RISK ASSESSMENT AND TECHNICAL STUDIES

**ACTIVITY** (in thousands): ENVIRONMENTAL DAMAGE ESTIMATION

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 0 | 0 | 120 | +120 |

**PROBLEM STATEMENT:**

The Pipeline Safety Act of 1992 requires that the Secretary of Transportation give equal consideration to environmental and safety concerns when protecting the general public from the risks of pipeline transportation. This greater concern for the potential environmental consequences of pipeline spills reflects increased public awareness of these dangers.

As a result of the review of the hazardous liquid pipeline program following the March 1993 spill in Fairfax County, the Secretary of Transportation is directing preventative safety measures aimed at reducing the amount of hazardous liquids that are released to the environment during spills from pipelines, and improved response when releases do occur. These measures will include more rulemakings aimed at preventing hazardous liquid spills. To meet the guidelines of the National Environmental Policy Act (NEPA), these rulemakings must be accompanied by environmental studies such as environmental assessments (EA) and environmental impact statements (EIS).

RSPA requires additional data on environmental damage from pipeline leaks, particularly for small spills about which little information is available. Without adequate data, RSPA cannot accurately assess the need for, or the benefits of, rules designed to protect the environment.

New techniques are being developed to quantify the costs of hazardous liquid spills on the environment. These mathematical and statistical techniques include natural resource damage assessments (NRDA). Some of these quantitative methods, including using value and contingent valuation, are gaining increased acceptability as an appropriate means of quantifying environmental resource damage. It will be necessary for OPS to use these techniques to ensure that the environmental studies and cost/benefit analyses that accompany proposed rulemakings meet statutory and administrative standards. These methodologies attempt to quantify the value to society of scenic rivers, endangered species, and recreational facilities, which would be adversely affected by spills.

**ACCOMPLISHMENTS:**

OPS' rulemaking on hydrostatic testing includes the first environmental assessment ever performed by OPS. The economic evaluation for the pipeline response plans rulemaking under the Oil Pollution Act included the first discussion by OPS of a natural resource damage assessment.

**PLANNED FOR FY 1995:**

In FY 1995, RSPA intends to further improve its environmental analysis capability including the collection of improved data on impacts of hazardous liquid spills and the use of more sophisticated natural resource damage assessment methodology. OPS will acquire this through contractual support. OPS believes that by FY 1995 many rulemakings will require accompanying environmental studies.

**CONSEQUENCES OF NOT FUNDING:**

The failure to acquire environment resource data will seriously impede RSPA's fulfillment of its environmental mission, including the timely promulgation of the most cost-effective techniques for managing environmental risk. With OPS's increased workload, as well as more active involvement with environmental groups, contract support is necessary to meet the requirements of NEPA.

## PROGRAM: COMPLIANCE

**ACTIVITY** (in thousands): SUPPORT SERVICES FOR INSPECTION OF CONSTRUCTION & INVESTIGATION OF ACCIDENTS

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 26 | 26 | 325 | +299 |

**Note:** This program was titled "INVESTIGATE/ANALYZE PIPELINE ACCIDENTS" in FY 1994. It has been retitled for clarity.

**PROBLEM STATEMENT:**

Inspection of pipeline operations, investigation of accidents and witnessing remedial testing are critical compliance activities that are extremely labor intensive. In order to provide better oversight and meet goals set by the Secretary following his environmental review of the pipeline program, RSPA needs to put more attention on witnessing pipeline operations in the field.

Construction is a critical phase during the life span of a pipeline. Inadequate practices during construction can perpetuate a variety of pipe defects and other abnormal circumstances that may take years before culminating in an operational failure or accident. Timely and frequent construction oversight is therefore key to assuring pipeline integrity.

In addition to construction-related problems, pipeline accidents are the result of a variety of other causes. Knowing the cause of an accident is a first step to preventing similar accidents in the future. To fully assess accident cause and determine appropriate remedial measures, it is necessary to go to the scene of the accident and observe the damage firsthand as well as talk with personnel responsible for pipeline operation and maintenance. In 1992, OPS safety inspectors were able to investigate only 9 percent of the accidents that met OPS reporting requirements.

Another important facet of determining the cause of an accident is the evaluation of information derived from laboratory metallurgical investigation of the pieces of the pipeline that failed. OPS has to rely on outside facilities to conduct metallurgical investigations to enable a timely conclusion of an accident investigation. This support must be available on an as-needed basis, depending on types of accidents which occur in any given year.

In addition to accident investigation, on-site witnessing of repairs and associated tests is important prior to resumption of service to corroborate operator actions and allay public concerns about the soundness of a pipeline after an accident.

## ACCOMPLISHMENTS:

In 1992, OPS conducted 16 new construction inspections and 48 accident investigations and public complaints. OPS brought 148 compliance actions against pipeline operators, many of which resulted from accident investigations. Experience gained as the result of accident investigations and engineering analyses aids in the prioritization of risk based inspection; in the execution of future inspections and accident investigations; and in the evolution of pipeline safety and environmental research and other initiatives, including regulatory development. For example, as a result of findings from accident analyses, OPS policy now requires operators, experiencing a longitudinal split seam in a pipeline, to reduce operating pressure by 20 percent and successfully complete a hydrostatic test or other means of establishing system integrity, before the line is returned to full operating pressure.

## PLANNED FOR FY 1995:

To support the Secretary's policy of putting more emphasis on inspection of new pipeline construction, RSPA will engage contractor personnel to conduct a majority of new construction inspections and accident investigations when existing engineering staff are not available. This augmentation will allow RSPA to conduct an appropriate number of inspections and investigations to assure public safety and environmental protection. Contractor personnel will:

- Conduct inspections of construction of hazardous liquid pipelines to ensure they meet federal pipeline safety regulations related to welding, coating, testing, and backfilling
- Provide support for investigations of accidents involving hazardous liquid pipelines to determine causes and adequacy of operator remedial actions, and assess operator responses to accidents
- Witness remedial repairs, associated hydrostatic tests, pigging, etc., to ensure pipeline soundness and satisfy public concern that the operator is in full compliance with safety and environmental requirements prior to restoring service
- Provide metallurgical lab support to analyze failed pipe on a standby basis.

## CONSEQUENCES OF NOT FUNDING:

Assuring compliance with the pipeline safety regulations and relevant industry standards during construction is critical to pipeline integrity. Lack of funding for this initiative would limit OPS inspection capabilities, resulting in undetected construction defects which could lead to pipeline failures causing deaths, injuries, or serious environmental damage. Construction oversight of a new 177-mile transmission pipeline in South Dakota took 10 weeks of an inspector's time, resulting in 10 to 15 standard inspections not being conducted.

The remedial measures taken as a result of accident investigations assure the integrity and safe operation of the pipeline systems in question. Lack of funding would lead to potentially identifiable pipeline defects not being identified during an accident investigation or addressed after an accident in remedial testing. Use of OPS inspectors for accident investigations diverts limited resources from performing standard inspections and handling public complaints. A typical accident investigation can take anywhere from 1 to 6 weeks of an inspector's time. At the extreme, the Colonial Pipeline spill of 400,000 gallons of diesel fuel into a tributary of the Potomac River involved 40 weeks of inspector time on-scene and preparing necessary paperwork, resulting in 20 standard inspections scheduled in the Eastern Region not being conducted.

## PROGRAM: COMPLIANCE

**ACTIVITY** (in thousands): IMPLEMENTATION OF ALCOHOL TESTING REGULATIONS AND MONITORING OF DRUG/ ALCOHOL MANAGEMENT INFORMATION SYSTEM

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 50 | 50 | 50 | 0 |

**PROBLEM STATEMENT:**

There is a need to review operator drug and alcohol testing statistical data to support regulatory and compliance decision making. Currently, RSPA does not have the data necessary to support drug and alcohol testing program decision making or the Department's policy that modal drug and alcohol testing programs be thoroughly and consistently applied. To provide an adequate level of program review and assist in decision making, additional resources are required to support the implementation of alcohol testing regulations and that portion of the Department's Management Information System (MIS) reporting requirements applicable to pipeline operators. Once adopted, operators would have to submit statistical data annually on their drug and alcohol testing programs.

**ACCOMPLISHMENTS:**

In FY 1993, RSPA worked with the Department's Office of Drug Enforcement and Program Compliance, and other modal administrations, and began development of an MIS program to track the impact of transportation industry drug and alcohol testing programs. An assessment of the impacts on the industry was completed, including estimates of time and cost imposed on individual operators and the industry in general to meet MIS requirements. RSPA also provided a strategy for data collection along with information on how reports from operators would be processed internally, and the time and resources required for data entry, verification, and analysis.

RSPA is developing a computer-based software program to manage all aspects of the MIS data collection, entry, and analysis process necessary to handle over 3,000 records expected in early 1995. The system provides a means of monitoring operator compliance with the drug and alcohol testing regulations, and determining the extent to which drug and alcohol testing are having a positive impact on safety. RSPA is now analyzing an increasing number of complex statistical issues and anticipates that with the implementation of alcohol testing programs slated for late 1994, the design of evaluative studies would add to this workload.

The pilot MIS program is nearing completion and the results should demonstrate how pipeline operators would collect the necessary statistical data and complete the required report. The results would point out any potential flaws or errors that would then be corrected prior to issuance of a final rule.

**PLANNED FOR FY 1995:**

RSPA will implement alcohol misuse testing programs by pipeline operators in December 1994, and require operators to begin submitting drug and alcohol statistical data on their programs in FY 1995. Using contractor services, RSPA will validate reports from approximately 3,000 operators, perform data entry on all reports, re-verify about 20 percent of the reports due to errors or missing data elements, analyze data submitted, and develop reports.

## PROGRAM: PIPELINE SAFETY TRAINING AND INFORMATION DISSEMINATION

**ACTIVITY** (in thousands): PIPELINE SAFETY TRAINING AND INFORMATION DISSEMINATION

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 755 | 925 | 871 | -54 |

### PROBLEM STATEMENT:

Ensuring the safety of the Nation's pipelines is largely a function of industry compliance with minimum Federal safety regulations covering pipeline design, construction, operation, and maintenance. Compliance, in turn, is directly related to the independent oversight provided by trained government safety inspectors who monitor pipeline operations, and informed industry personnel who operate pipelines on a daily basis. Currently, 250 state and 24 Federal safety inspectors monitor 3,000 pipeline operators.

A gap currently exists between course offerings at RSPA's Transportation Safety Institute (TSI) and the demonstrated need for training. In the past year, TSI was able to offer only 16 classes against a demand for 23 classes -- responding to only 61 percent of state requests and 10 percent of industry requests. This shortfall makes it difficult for states to meet RSPA's requirement that state inspectors complete all applicable training courses at TSI in a 3-year period to be eligible for maximum grant funding.

It is critical that those expected to comply with Federal regulations are trained under the same curricula and level of understanding as those who enforce the regulations; otherwise industry is at a disadvantage and compliance suffers. Small operators, particularly, need easy-to-understand guidelines laying out their basic safety and environmental responsibilities. This need is heightened by new rulemaking activities, evolving technology, and retirement and turnover of operator personnel.

Using our existing resource level, RSPA will place new emphasis on hazardous liquid training. This emphasis results from the Secretary's environmental program review in the wake of growing public and congressional concern about the soundness of the country's hazardous liquid pipelines and recent statutory mandates elevating environmental protection on a par with public safety.

### ACCOMPLISHMENTS:

The pipeline safety training program has received national and international recognition. Since FY 1985, 129 classes and 164 seminars have been conducted for approximately 20,000 students. By the end of FY 1993, it is projected that 2,250 students will be trained in 17 classes and 16 state seminars for approximately

62,000 training hours. This will represent an increase of 74 percent in students and 62 percent in training hours since FY 1985. TSI also processes approximately 25,000 requests annually for manuals, diskettes, videos, and other material. Additionally, about 30 percent of staff time is spent providing technical assistance to industry through daily calls about regulations, applications, industry standards, and safety issues.

## PLANNED FOR FY 1995:

RSPA will continue to provide resident training at its TSI facility in Oklahoma City and nonresident regional training at state-selected sites across the country and will conduct 18 classes and 20 seminars. Training is an integral part of the Federal/state cooperative pipeline safety program.

- Industry computer simulation training for gas and liquid operators should continue based on the success of the effort funded by the "seed money" provided in FY 1993 and FY 1994. Industry tuition fees, which may be credited to the appropriation, make this training self-sustaining. Simulation training increases safety by more thoroughly instructing dispatchers on the potentially hazardous or abnormal situations they may encounter in controlling product movement, and what the proper response to those emergency situations should be. This computer simulation allows the dispatcher to train on his or her own system through a broad range of display configurations.

- RSPA will continue to provide comprehensive information, guidance, and technical direction through interpretation and dissemination of related materials. Information includes regulation manuals, alert notices, advisory bulletins, flow charts, schematics, summaries of regulatory amendments, current enforcement issues, statistical data, and guidance for implementation of the anti-drug program.

- TSI will begin to develop a full-fledged, stand-alone hazardous liquid training program, incorporating existing liquid portions of gas courses and new liquid-unique curriculum material. The ratio of liquid to gas classes and seminars will be increased, reflecting the increased emphasis by both state and Federal safety inspectors on hazardous liquid pipeline inspections and accident investigations.

## PROGRAM: EMERGENCY NOTIFICATION

**ACTIVITY** (in thousands): NATIONAL RESPONSE CENTER SUPPORT

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 50 | 100 | 100 | 0 |

### PROBLEM STATEMENT:

RSPA needs timely, accurate notification immediately after the occurrence of a major pipeline incident to initiate appropriate corrective measures to prevent further damage or loss of life. RSPA also must have facts about the incident to be responsive to NTSB, Congressional, and media calls received in the aftermath of any major emergency. Having preliminary knowledge of the location, damage, and probable cause is critical to the determination of the type of response that is necessary.

The pipeline safety regulations require pipeline operators at the earliest practicable moment following discovery to telephonically report incidents involving the transportation of natural gas and hazardous liquids by pipeline. RSPA personnel spend significant time determining appropriate follow-up actions to operators' telephonic reports of pipeline incidents. The telephonic reports should contain enough information so that RSPA can determine if the incident involves a pipeline under its or a state agency's jurisdiction.

### ACCOMPLISHMENTS:

RSPA has utilized the NRC for over 12 years. Increasing efforts to inform the public and industry of reporting requirements continues to raise the number of reports received annually. The following table depicts current trends in increased reporting:

Workload Indicators

| | 1989 | 1990 | 1991 | 1992 | 1993* | 1994* | 1995* |
|---|---|---|---|---|---|---|---|
| Telephonic Notices Reported to RSPA | 2357 | 2778 | 2584 | 3434 | 3547 | 3851 | 4155 |

* Estimates based on current trends and does not take into account potential increase in reporting due to future jurisdiction over low stress hazardous liquid pipelines.

**PLANNED FOR FY 1995:**

The National Response Center (NRC), operated by the USCG, receives reports and initiates actions which lead to the appropriate response to pipeline incidents. The NRC is operated 24 hours per day, 7 days per week, and provides immediate telephonic notification to RSPA and the National Transportation Safety Board (NTSB) of pipeline incidents which meet prescribed guidelines. The NRC service facilitates prompt federal and state response to emergencies.

RSPA will continue to utilize the NRC for emergency notification services. These services are fundamental to administering an effective safety program. The telephonic data increasingly is accessed by other federal and state agencies, such as NTSB, FERC, EPA, and many state pipeline safety offices. RSPA is now sharing information with the Occupational Safety and Health Administration as mandated by Congress. The resulting analyses play a significant role in ensuring environmental and public safety. The increase in the number of reports received places an additional burden on the existing NRC staff to cope with the increasing load.

## OPA MISSION

The Oil Pollution Act of 1990 (OPA 90), P.L. 101-380, is comprehensive legislation which amends the Federal Water Pollution Control Act, among other purposes, to minimize the environmental impact of oil spills and to improve public and private sector response capabilities. The Secretary of Transportation delegated to the Research and Special Programs Administration's (RSPA) Office of Pipeline Safety (OPS) the responsibility for implementing the mandates of OPA 90 applicable to onshore pipelines.

In FY 1992, these responsibilities further expanded the role of OPS in protecting the environment from damage by pipeline facilities and brought under RSPA jurisdiction hundreds of pipeline facilities, including federally managed pipeline facilities, previously excepted by the Hazardous Liquid Pipeline Safety Act or regulations. The new requirements for pipeline facilities substantially increased response planning duties of operators. These same mandates resulted in OPS undertaking an entirely new responsibility with extensive work requirements involved in response plan approval. RSPA began regulatory work in FY 1992, plan processing in FY 1993, and substantive review work in FY 1994.

In its execution of OPA responsibilities, RSPA uses every opportunity to take information and experience gained from the review of operators' response plans and capabilities and apply it to the benefit of its base pipeline safety program. These benefits include:

- Obtaining data on the inventory of previously unregulated pipelines;
- Obtaining the description and ranking of environmentally sensitive areas, including the location of vital public water supplies in relation to pipelines;
- Obtaining data on leak detection, monitoring, emergency valve placement and automated shut down systems;
- Improving notification systems and contacts for use during pipeline accidents; and
- Obtaining maps which can form the basis of a geographic information system that will support risk-based decision making in both the public and private sector.

## TRUST FUND SHARE OF PIPELINE SAFETY

## PROGRAM: IMPLEMENTATION OF THE OIL POLLUTION ACT

**ACTIVITY** (in thousands): PIPELINE PLAN ANALYSIS & PRIORITIZATION

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 0 | 2,268 * | 2,520 * | +252 |

* Only Contract Program funding is represented here.

**PROBLEM STATEMENT:**

Data from the National Response Center indicate that approximately 2,700 pipeline spills are reported each year. Of these, which include many low stress and other pipelines not previously regulated under the HLPSA, approximately half affect water. RSPA is in the process of better determining what are environmentally sensitive areas for the purpose of both operator response planning and RSPA's regulatory and compliance programs. Pipeline spill response planning is essential to building an improved National Response System to mitigate oil spills.

OPA mandates that the Department review pipeline facility response plans, require amendments to any plan that is deficient, and approve any plan that complies with those provisions, according to an established implementation schedule and periodically thereafter. Additionally, the on-going work of statutorily mandated area committees was resulting in the development of area contingency plans, with specifications for operator response. These plans may result in the subdivision by operators of existing plans into more, but smaller planning zones requiring new plans.

Further, while response plans are an initial step in preparing for a spill event, it is the practice of testing or drilling plans through a variety of "exercises" that provides an adequate level of preparedness based on experience. Given the unique nature of pipeline operations and the geographic layout of pipeline facilities, a pipeline-oriented exercise program is needed to address the preparedness of pipeline operator personnel and resources spread out over hundreds of miles. While RSPA believes that most pipeline operator exercises should be conducted internally, there is a need for oversight of the external phase of exercise requirements that extend outside the individual corporate structure to the entire response community, including both industry and government, and including the area contingency planners.

**ACCOMPLISHMENTS:**

In FY 1993, RSPA issued an interim final rule establishing the requirements for response plans for on-shore pipelines. A primary FY 1993 activity was the processing of facility response plans. Further, RSPA assumed new roles in interagency coordination with the National Response Team and particularly with the other agencies with regulatory responsibilities in response planning -- U.S. Coast Guard, the Environmental Protection Agency and the Department of the Interior's Minerals Management Service. The agencies have worked to assure a uniform approach to OPA implementation and plan review, minimize burdens on industry, and ensure conformity with the National Contingency Plan and Area Contingency Plans. RSPA worked additionally with the federal agencies who have "trustee" responsibilities to protect the nation's natural resources on providing guidance to operators on the description of environmentally sensitive areas.

RSPA joined forces with these same agencies to create the National Preparedness for Response Exercise Program (PREP). The purpose of PREP is to enhance the preparedness of the National Response System, by improving the ability of government and industry to work in concert according to applicable area contingency plans and operator response plans.

RSPA's goal has been to achieve 1) integration of pipeline operator capabilities with the entire response community by conducting exercises to test preparedness, and 2) consistency with national standards for evaluation of preparedness exercises.

In FY 1994, RSPA expected to become nominally familiar with inventories of environmentally sensitive locations and the ranking of these sites on a risk-priority basis. RSPA reviewed data available in the plans to determine potential vulnerability of the environmentally sensitive sites to "worst case" pipeline spills. RSPA expected to proceed with substantive plan review in FY 1994.

**PLANNED FOR FY 1995:**

RSPA will continue to review and approve operator plans for environmental protection and response capability, will perform geographic and environmental data entry in a national mapping and tracking system, and will perform plan testing through an exercise program.

- RSPA will consider geographical areas traversed, proximity of public drinking water intakes, classes of facilities, operating conditions, and damage history.
- RSPA will load response planning, geographic and environmental impact data into a mapping information system, tabulating the bases for zones meeting the higher risk criteria, quantifying volume spilled for different types of spill scenarios, and establishing costs of consequences of these spill scenarios.

- RSPA will determine whether the risk of pollution from oil pipelines can and should be prioritized and the appropriateness of using a risk-ranking scheme to include or exclude certain areas from environmental protection.

- RSPA expects to complete the first round of plan reviews in FY 1995. The standardized plan approval and exercise process includes assessing:

  - resources, communications and organizational capabilities,
  - spill detection and mitigation procedures
  - methodology of calculating worst case discharge,
  - consistency with the area contingency plan,
  - identification of environmentally sensitive areas and drinking water intakes, and
  - adequacy of training, equipment testing, drill programs and other factors.

- RSPA will require plan amendments as needed to assure that plans meet requirements of the OPA.

- Additional analyses include determining areas of suggested improvements and performing quality control checks on 20 percent of the response plans to verify assumptions and parameters provided by operators, and regulatory support.

- RSPA also needs to design an exercise program to assure the public, the response community and the industry, that sufficient attention has been paid to emergency functions which extend outside the company, including public/private sector organizational linkages, and a process to make expeditious population and environmental protection decisions. In order to achieve integration of pipeline operators capabilities with the entire response community, RSPA plans in FY 1995 to design and begin execution of a program of "table top" exercises on strategic issues.

## PROGRAM: RESEARCH AND DEVELOPMENT

### MISSION

With RSPA's historic and principal emphasis on applied research, the R&D program is well-positioned to provide the necessary technical and analytical foundation on which to build RSPA's risk-based pipeline safety program planning. As RSPA moves its pipeline safety program toward full risk management and away from solely regulatory-based solutions, the R&D program will provide the critical connection between identifying and evaluating risks and determining the most appropriate solutions. Requested increases in information systems and risk assessment support are intended to address this priority.

As such, the R&D program is critical to the success of RSPA in meeting the mandates of the PSA 92 within the context of overall risk management. Congress recognized this relationship between the subjects it required RSPA to address and the agency's ability to effectively manage a comprehensive pipeline safety program, by providing substantial discretion in how the mandates are carried out.

PSA 92 also required that RSPA issue regulations to provide for the protection of the environment. Most of the R & D initiatives in FY 1995 address environmental studies. Benefits from the R&D program are advancing pipeline technology and expertise and providing for use of new pipeline construction, maintenance methods and materials.

| | FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|---|
| **R&D Program Totals:** | 700 | 875 | 1,123 | +248 |
| **R&D Program Breakdown:** | | | | |
| Information Systems | 325 | 350 | 655 | +305 |
| Evaluate New Pipeline Component Technology | 75 | 75 | 75 | 0 |
| Pipeline Design & Operating Criteria | 0 | 0 | 100 | +100 |
| Underground Storage | 0 | 125 | 75 | -50 |
| Corrosion Protection - Breakout Tanks | 0 | 50 | 50 | 0 |
| Risk Assessment | 0 | 50 | 168 | +118 |
| Cast Iron Survey | 0 | 100 | 0 | -100 |
| Custom-Owned Service Lines | 0 | 125 | 0 | -125 |
| Identify Environmentally-Sensitive Areas and Protective Measures | 100 | 0 | 0 | -100 |

## RESEARCH AND DEVELOPMENT

## MANAGEMENT AND ANALYSIS

**ACTIVITY** (in thousands): INFORMATION SYSTEMS DEVELOPMENT

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 325 | 350 | 655 | +305 |

**PROBLEM STATEMENT:**

The Secretary's 1989 Safety Review Task Force and the Congressional Office of Technology Assessment, in their evaluations of RSPA pipeline safety data collection and analysis activities, recognized the limitations on RSPA's ability to collect complete and accurate safety data. Those evaluations emphasized the need for expansion of data and associated data analysis. Further, a GAO report on pollution from pipelines recommended that RSPA collect and develop information on the location of petroleum pipelines in a form suitable for use by the Coast Guard in responding to pipeline spills. The OPS work redesign initiative identified enhanced information systems capability as fundamental to enabling OPS to increase its productivity.

RSPA needs support for analyses and evaluations in order to provide a basis for undertaking appropriate program initiatives in the near term and for shaping program direction in the long term. To date, our efforts to prioritize research studies and regulatory initiatives have been handicapped by analytical limitations. The Risk Assessment Program (RAP) is OPS' primary focus for comprehensive prioritization of tasks, and depends on accurate data for credibility in its output. Additional effort must be directed to information system design, development, and enhancement to achieve an adequate level of data quality and to carry the required data workload.

NOTE: Funding has been requested under both program and R & D categories. RSPA's intent is to provide a portion of the funding in "no-year money" that can be used for carry over operations and services that would otherwise lapse after one fiscal year.

**ACCOMPLISHMENTS:**

RSPA continues to improve its existing data systems, and has begun to develop new data systems, including:

- o An enforcement tracking system which connects with information contained in the data base containing information relating to inspection of pipeline operators, OPINS. A system improvement is being incorporated which provides consistent data entry of violations cited.

- Development of menus enabling searches by operator name through the universe of operator-related data bases to facilitate collection of all available data concerning a particular operator.

- Development of a program which will use the operator name as the basis for tracking pipelines throughout all operator-related datasets.

- Development of a program for tracking data in OPA Response Plans and Exercises is underway.

- A team formed from employees representing a cross-section of OPS' workforce has been formed to establish policies for information systems standards. The team is already working to set standards for implementation of OPS' new software development platform, Lotus Notes.

**PLANNED FOR FY 1995:**

As it has in the past, RSPA will use contract support to pursue this effort, which is more cost effective than hiring federal employees. New emphasis has been placed on system capabilities and features that facilitate risk-based planning. Additionally, systems will be designed which are user friendly, maximize use of RSPA resources, and allow linkage to other data bases and inter-connectivity among headquarters and regions. States and other stakeholders need to be provided access to the data bases as well.

- In FY 1995, RSPA intends to continue development of MARED, a regulatory history system, including data base development and an audit function to ensure data integrity. MARED will streamline and standardize the regulatory development process through integration of regulatory history and institutional knowledge, tracking of regulatory actions, and consolidation of interpretations. MARED will be critical for developing non-regulatory solutions and applying the risk model to all program activities. FY 1995 work will continue the development and implementation of MARED, with imaging systems to incorporate paper and electronic-based information into a unified system.

- RSPA will continue development of a hazardous liquid pipeline data base and analyses of hazardous liquid data. A new universe of pipeline operators about which little or no data exist will be gathered in the data base . This results from mandates regarding low stress pipelines and rural gathering lines under the Pipeline Safety Act of 1992 and the Oil Pollution Act of 1990.

- RSPA will continue HURMES (Human Resources Management System), an OPS work redesign initiative, to provide important resource utilization and estimation data, needed by the risk based planning and prioritization computer program (RIBS).

- RSPA will begin BUGS (Budget, User Fees, and Grant Allocations System). This is one of the information systems proposed by the work redesign initiative. It will provide cost and resource availability data needed for risk based planning and for effectively managing the increasingly complex information system used to allocate grant funds across various state programs.

- RSPA will begin IOCS (Integrated Operator and Compliance System). This will be an enhancement of the IPIS. The feasibility of transporting the data bases from the VAX to a PC-based LAN environment located in Washington, DC will be investigated. An assessment of existing technological enhancements to the existing VAX system will also be conducted. Tradeoffs between the two options will be assessed. Based on the results of the study, RSPA will either begin conversion to the RSPA LAN system, or will implement a solution to enhance access to the existing VAX systems with a Microsoft Windows compatible interface. Initial scoping and systems development will begin.

- Additional activities include support for the Risk Assessment Prioritization program with software development, data entry, and data analysis; data consolidation, integration, and training support for proposed new OPS work redesign software (MARED, OMIS, HURMES, SIPS, IOCS, BUGS and Lotus Notes); and maintenance and analytical support to operate GIS systems that are developed under other project activities. Electronically retrievable systems will replace files of regulations, accident and incident data submitted on hard copy by operators.

**CONSEQUENCES OF NOT FUNDING:**

The FY 1995 request for information system development is necessary to enable RSPA to address shortcomings in pipeline safety data collection and analysis which have adversely affected regulatory and compliance initiatives and safety policy. Decentralization efforts will be limited if access to information is not improved through development of work redesign-related information systems. Without computer-aided support for regulatory development under MARED and availability of resource data for risk based planning provided by HURMES, RSPA could not carry out risk-based planning. If contractor support is not utilized for coordination of digital data made available through GIS systems, RSPA will be unable to offer the assistance requested by state and local agencies for data needed to set area environmental priorities and will not be in a position to utilize the enhanced analysis capabilities this technology offers.

## PROGRAM: RESEARCH AND DEVELOPMENT

## RESEARCH STUDIES

**ACTIVITY** (in thousands): EVALUATE NEW PIPELINE TECHNOLOGY (CHECK VALVES)

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 75 | 75 | 75 | 0 |

**PROBLEM STATEMENT:**

Many operators of natural gas and hazardous liquid pipelines fail to inspect, maintain, and test check valves installed in their systems because federal pipeline safety regulations do not clearly state these requirements. Consequently, certain malfunctioned check valves in federally regulated pipelines have gone undetected and exacerbated pipeline failures.

**ACCOMPLISHMENTS:**

RSPA has studied the use of remote inspection technology for determining if check valves in buried pipelines will operate as designed. This study responds, in part, to a recommendation from the National Transportation Safety Board (NTSB). The purpose of the study was to assess the technical feasibility of requiring pipeline operators to test and inspect check valves in federally regulated pipelines. The study showed that several inspection technologies could theoretically be used. For example, the study revealed that acoustic signature analysis, ultrasonic signature analysis, and magnetic signature analysis are methods that can assess check valve operability from remote locations. This study will identify new ways to improve public safety, protect the environment, and develop new technology and expertise.

**PLANNED FOR FY 1995:**

RSPA will continue prior efforts in review of remote inspection technology for check valve performance and will study the economic feasibility of requiring inspection, maintenance, and testing of check valves in interstate natural gas and hazardous liquid pipelines.

## PROGRAM: RESEARCH AND DEVELOPMENT

**ACTIVITY** (in thousands): PIPELINE DESIGN AND OPERATING CRITERIA

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 0 | 0 | 100 | +100 |

**PROBLEM STATEMENT:**

The Natural Gas Pipeline Safety Act was enacted in 1968 and the Hazardous Liquids Pipeline Safety Act was enacted in 1979. The criteria for pipeline design and operating pressure for natural gas and hazardous liquid pipelines incorporated in the regulations issued in response to these acts were adapted from codes of the American Society of Mechanical Engineers (ASME) that existed at that time. Among the various ASME codes for steel pressure piping and pressure vessels, the safety margins between material strength and maximum allowable operating pressure are the smallest for all hazardous liquid pipelines and for gas pipelines in areas of lowest population density.

In the second half of this century, there has been significant research about the characteristics of pipelines and pipe steels, principally under the auspices of pipeline industry and steel manufacturer trade associations. Both industries desired to prevent accidents and limit the consequences of those that occurred. The knowledge derived from this research allows considerably better understanding of the factors that determine the mode of failure of pipelines (slow leak versus limited rupture versus running rupture) and the material properties and pipeline design criteria that control the mode of pipeline failure. Concurrently, higher strength steel pipe grades have been developed, resulting in the use of thinner wall pipe. Thinner wall pipe is more vulnerable to structural damage and failure from defects originating from such causes as external force damage.

At this time, pipeline safety concerns have been extended to include protection of the environment. The recent major spill from the Colonial Pipeline at Reston, Virginia, has focused attention on the prevention of potentially catastrophic spills from hazardous liquid pipelines. In turn, questions have been raised about pipeline pressure design and allowable operating pressure, particularly in high-risk (environmentally sensitive and high-density populated) areas. The gas pipeline safety regulations always have required higher factors of safety for the design of pipelines in areas of increasingly higher population density. There is no similar consideration in the hazardous liquid pipeline safety regulations.

**ACCOMPLISHMENTS:**

In September 1993, as a compliance activity, RSPA initiated a review of pipeline design and operating pressure criteria by the National Institute of Standards and Technology (NIST) to be completed 1Q FY 1994. NIST has been requested to analyze current literature and to propose recommendations as to follow-on actions regarding existing hazardous liquid and natural gas pipeline design and maximum operating pressure criteria.

**PLANNED FOR FY 1995:**

In 1995, RSPA intends to initiate an Interagency Agreement with NIST to thoroughly evaluate the current principles of natural gas and hazardous liquid pipeline design and allowable operating pressure and to develop specific proposals for changes to the pipeline safety regulations, taking into consideration the latest technology available. The tasks would include:

- Evaluating the relevance of leak before rupture principles to the design and operation of pipelines.
- Evaluating fracture mechanics principles for application to pipeline design and operation of pipelines.
- Evaluating pipeline operating pressure limitations in relation to specified minimum yield strength and minimum hydrostatic test pressure.
- Evaluating pipeline design and operating pressure limitations as a function of steel strength and fracture toughness.
- Evaluating pipeline design and operating pressure limitations as a function of typical pipe defects and of damage and stress resulting from outside forces, both man-made and natural.
- Developing proposals for modifications to materials, design, and operating pressure criteria in the current pipeline safety regulations.

**CONSEQUENCES OF NOT FUNDING:**

Reduction or elimination of funding to evaluate current pipeline design and operating pressure criteria would limit RSPA's ability to establish the validity of those current criteria relative to the technical developments of the recent decades. The resultant impact may be to diminish the credibility of RSPA for its failure to adapt its regulations to understandings of risk and new technology.

## PROGRAM: RESEARCH AND DEVELOPMENT

## RESEARCH STUDIES

**ACTIVITY** (in thousands): UNDERGROUND STORAGE STUDY

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 0 | 125 | 75 | -50 |

**PROBLEM STATEMENT:**

There are currently unresolved safety and jurisdiction questions regarding underground storage caverns and reservoirs. An incident near Brenham, Texas, involving an underground storage cavern resulted in three fatalities and 17 injuries requiring medical attention. In addition to the Brenham, Texas, accident, a cavern failure near Iowa City, Iowa, in 1987 resulted in the release of 5.6 million gallons of a highly volatile liquid which ignited and burned for approximately 3 weeks causing evacuations and damage estimated at approximately $1,500,000. In November 1989 a cavern failure near Jasper, Missouri, resulted in damage estimated at $1,500,000 and caused the evacuation of residents from their homes. Home owners in Conway, Kansas, were forced to sell their properties to pipeline companies due to ground water contamination from failure of the cavern formations to contain the product stored.

Industry studies indicate that in 26 states, there are 1,122 underground hazardous liquid facilities with a storage capacity of 518 million barrels and in 27 states, 395 natural gas facilities with a storage capacity of 7,836 BCF (billion cubic feet). Safety and environmental hazards associated with the underground storage of highly volatile liquids, other hazardous liquids, and natural gas require comprehensive analysis. We have no safety regulations specifically covering underground storage caverns and reservoirs and state jurisdiction is not clear.

**ACCOMPLISHMENTS:**

The study in 1994 will confirm the location, capacity, and number of underground storage caverns and reservoirs operating in the United States. RSPA expects this study to include names of operating companies, geographical location of the storage caverns and reservoirs, product stored, and capacity of the caverns. Although as part of its FY 1994 work, RSPA will have inspected a limited number of cavern operations, experience with underground storage caverns and reservoirs will be limited.

**PLANNED FOR FY 1995:**

Using contractor support, RSPA must now determine which states have jurisdiction over underground storage caverns and reservoirs and the scope of their jurisdiction and regulations. RSPA also plans to evaluate the safety devices and maintenance requirements of underground storage caverns and reservoirs, and formulate criteria to safely operate the cavern and associated pipelines. This effort is needed to determine where, within OPS's risk-based planning, this issue should fall and what resources and approaches are needed to address it. RSPA will continue the study, evaluating the concerns mentioned above related to all underground storage caverns and reservoirs operating in the United States. The reports generated from this study will be widely distributed in order to address the safety and environmental protection issues of storage caverns and reservoirs identified in the study.

This next phase of the study will determine the safety codes and standards currently governing the operation of underground storage caverns and reservoirs. This phase will also identify the governing entities and their jurisdictional boundaries regarding storage cavern facilities and reservoirs. A third phase may be necessary in order to develop the bases for potential solutions to the problems identified in the prior two phases.

## PROGRAM: RESEARCH AND DEVELOPMENT

## COMPLIANCE

**ACTIVITY** (in thousands): CORROSION PROTECTION OF BREAKOUT TANKS

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 0 | 50 | 50 | 0 |

**PROBLEM STATEMENT:**

The Secretary's environmental program review of the pipeline safety program identified the need for increased oversight of hazardous liquid pipelines reflecting growing public concern over the consequences of spills from these pipelines. Breakout tanks are a critical part of most hazardous liquid pipeline systems regulated by RSPA. These tanks are used to relieve surges in a hazardous liquid pipeline, or to receive and store hazardous liquids transported by a pipeline for future reinjection and continued transportation by pipeline. More than 9,000 breakout tanks exist in pipeline systems throughout the United States. At any given time, these tanks contain millions of gallons of hazardous liquids.

Breakout tanks are subject to both internal and external corrosion which can result in leakage from the tanks. There is risk to the public and to the environment from tanks which have been known to leak undetected for years, allowing the hazardous liquid to contaminate land and aquifers, as well as to produce vapors that result in public health risks. The recent leak in the terminal tank farm in Fairfax County, Virginia illustrates, through the impact of abandonment of homes and costs of cleanup, the long term effects that can be caused by neglecting corrosion control of these tanks.

Design of an effective cathodic protection system for a breakout tank is complex because of the configuration of the tank. Also, construction of effective external cathodic protection systems under existing tanks is difficult because they must be retrofitted.

RSPA presently requires that operators electrically inspect breakout tanks to determine the need for cathodic protection, and then provide cathodic protection "where necessary." RSPA presently does not specify the technical basis for determining adequate electrical inspection, adequate cathodic protection, when such protection is necessary, or how it should be monitored.

**ACCOMPLISHMENTS:**

A RSPA initiative, begun in FY 1994, is part of our continuing effort to improve our knowledge concerning the cathodic protection of breakout tanks and to assure the public safety and environmental protection from possible spills due to external corrosion.

In April 1991, the American Petroleum Institute (API) published for the first time a recommended practice (API 651) titled CATHODIC PROTECTION OF ABOVE GROUND PETROLEUM STORAGE TANKS.

The RSPA 1994 survey examined:

- Techniques for electrical inspection of cathodically unprotected breakout tanks (both full and empty), to locate possible corrosion of the tank bottom, and
- Designs for new cathodic protection systems for retrofitted breakout tanks installed as a result of using the electrical inspection techniques recommended in API 651.

**PLANNED FOR FY 1995:**

Completion of the survey begun in FY 1994 would examine:

- Changes in industry monitoring practices of cathodic protection systems of breakout tanks initiated as a result of API 651.
- The number of existing breakout tanks, installed before the federal pipeline safety rules, electrically surveyed according to the practices in API 651 and determined not to need cathodic protection.

Such factors as tank design, location (environmental sensitivity, population density, climate), and costs to implement protection also will be addressed to determine the need, if any, for additional regulation and the extent to which such regulation should be applied.

## PROGRAM: RESEARCH AND DEVELOPMENT

## MANAGEMENT AND ANALYSIS

**ACTIVITY** (in thousands): RISK ASSESSMENT

| FY 1993<br>Enacted | FY 1994<br>Enacted | FY 1995<br>Request | Difference |
|---|---|---|---|
| 0 | 50 | 168 | +118 |

**PROBLEM STATEMENT:**

The risk to public safety and the environment is not equally distributed over the nation's pipeline system. The cost of all potential actions or solutions to reduce risk far exceed any organization's resources. Our choice of where and how to best use appropriated resources must be based on our assessing risks and the potential effects of solutions.

In the past, RSPA's prioritization and use of resources have been dominated by mandates driven by public perceptions which may not have been substantiated by facts. In 1988, the Pipeline Safety Reauthorization Act directed 10 rulemakings and studies, many of which RSPA has been unable to complete due to the lack of a defensible basis on which to pursue the initiative. The Pipeline Safety Act of 1992 directs more than 30 mandates, many of which need to be justified on the basis of risk before resources are dedicated to their accomplishment. Structured risk assessment is consistent with the direction the pipeline industry and others, including codes and standards organizations, are taking to improve their use of resources.

An essential need, not fulfilled, is to determine the benefits derived from reducing the environmental consequences of accidents, for example, clean-up costs and impacts on ecosystems. RSPA expects to fill this need through contacts and cooperative efforts with its stakeholders. By using modern analytical tools and our institutional expertise in a carefully designed and consistently applied review process, we can assure ourselves, the public, industry, and our other stakeholders that we are maximizing the effectiveness of allocated resources. This need was recognized by the Office of Management and Budget in its policy passback on RSPA's FY 1993 budget request.

**ACCOMPLISHMENTS:**

In FY 1993, RSPA developed the technical ability to analyze potential OPS actions in terms of risk reduction to produce a rational, cost-effective national program. RSPA has made significant progress in the enhancement of existing data systems and development of new data and risk analysis systems to support pipeline safety activities, including:

- Development of a historical data base on accident and operator compliance history and enhancement of a risk-based program for pipeline operator inspection.
- Development of a menus program which allows direct computer access to accident data, annual reports, and safety-related condition reports.
- Development of a risk assessment model for prioritizing initiatives and maximizing the effectiveness of the resources allocated to us.
- Presentation of the risk assessment model in executive level briefings to congressional staff and the Office of Management and Budget.
- Presentation of the risk assessment model in public meetings that included participation by the National Transportation Safety Board, the National Association of Regulatory Utility Commissioners, the National Association of Pipeline Safety Representatives, the American Gas Association, the Gas Research Institute, the American Petroleum Institute, the Natural Resources Defense Council, the pipeline safety advisory committees, and pipeline operators.
- Adjustment of the risk assessment model to provide for stakeholder input to the development and implementation of the risk assessment model while retaining final decisions regarding prioritization in OPS.
- Purchase of the services of an organization expert in risk analysis and prioritization to support refinement and implementation of the risk assessment model.

**PLANNED FOR FY 1995:**

In FY 1995, RSPA intends to improve its risk assessment capability, utilizing contract support for planning and executing risk assessment functions, assessing external perceptions and activities related to pipeline safety and environmental protection.

RSPA will improve its risk assessment capability by enhancing our in-house capability to statistically analyze data bases, to perform economic estimates, and to assess risk trends. To support this initiative, RSPA will contract for supporting risk-based planning functions, for executing risk assessment functions, for assessing perceptions of stakeholders, and for accessing and analyzing external data bases to complement and expand in-house findings.

Tasks would include:

- Refining the risk based prioritization process. The process involves identifying risks, analyzing actions to mitigate risk (in terms of reduction of the probability and consequence of accidents and the estimated cost to industry and government of implementation), and identifying resources to implement mitigating actions.

- Execution of detailed functions inherent in the risk assessment process, such as maintenance of the computerized data base, entry of issues, solutions and ratings, and preparation of computer program outputs. The process involves processing of information in accordance with the risk assessment model.
- Assessment of situations external to RSPA by surveying activities, attitudes, and opinions among parties involved or participating in pipeline safety programs and environmental protection.
- Identifying, accessing, and analyzing data bases external to OPS by direct contacts with stakeholders, by designing and preparing notices to seek data, and by analyzing and synthesizing results.

**CONSEQUENCES OF NOT FUNDING:**

Reduction or elimination of funding to enhance the risk assessment capability will limit RSPA's ability to prioritize pipeline regulatory and compliance initiatives. The resulting impact on initiatives and policy will forestall RSPA's efforts to correct deficiencies in the effectiveness of the pipeline safety program and diminish its chances of restoring credibility with its stakeholders.

## PROGRAM: GRANTS

**ACTIVITY** (in thousands): NATURAL GAS AND HAZARDOUS LIQUID PIPELINE SAFETY GRANTS-IN-AID

| FY 1993 Enacted | FY 1994 Enacted | FY 1995 Request | Difference |
|---|---|---|---|
| 7,000 | 7,500 | 8,000 | +500 |

**PROBLEM STATEMENT:**

Both the Natural Gas Pipeline Safety Act and Hazardous Liquid Pipeline Safety Act provide authority for reimbursing states for up to 50 percent of the costs incurred in carrying out their pipeline safety programs. Since 1981, state requests for funds have exceeded appropriations, and RSPA developed methods to allocate available funds to the states. In 1992, the Federal contribution amounted to only 35 percent of state costs for the gas program and 28 percent for the liquid program. States are increasingly hard pressed to fund the shortfall in the Federal contribution, given their own budget constraints. In 1993, the National Association of Pipeline Safety Representatives petitioned the Federal government to live up to its commitment to fund state program costs at annually increasing amounts in order to meet the 50 percent level.

In return for 50 percent funding, states are expected to improve their program performance. However, a number of states continue to have difficulty adopting Federal regulations and extending their safety jurisdiction to all intrastate pipelines.

A major constraint to improving performance is the need for state legislative authority to adopt Federal requirements and the issue of "who speaks for the state." The state legislature, the public utility commission, and the state agency under the commission overseeing the program may have different levels of commitment to adopting Federal requirements. In an exit interview with the OPS Central Regional Office, Inspector General staff noted in auditing the program that a number of states had not adopted one-call notification systems and civil penalty requirements. Currently, 45 States, the District of Columbia and Puerto Rico participate in the hazardous gas program and 10 States participate in the hazardous liquid program.

The Secretary's environmental program review of the pipeline safety program identified the need for increased oversight of hazardous liquid pipelines reflecting growing public concern over the consequences of spills from these pipelines. This need, coupled with the new environmental mandates in the Pipeline Safety Act of 1992 (e.g., regulation of low stress pipelines), dramatically increases the pipeline safety inspection workload. To minimize the impact on Federal inspectors and at the same time leverage available resources, state agencies must become more involved in overseeing intrastate hazardous liquid pipelines. Only 10 out of 31 states having intrastate hazardous liquid lines currently participate in the liquid program. States can also be called on to serve as Federal agents on a permanent or temporary basis for conducting inspections and accident investigations involving interstate hazardous liquid pipelines under Federal jurisdiction.

**ACCOMPLISHMENTS:**

RSPA, working closely with states, continued efforts to restructure the allocation grant formula to increase the focus on state program performance. A final rule, issued February 23, 1993, codified the formula and phased in a performance-based approach, allowing states time to meet performance criteria and position themselves to be eligible for maximum funding. In 1993, 75 percent of grant funds were allocated to states on the basis of program performance, compared to 50 percent in 1992.

RSPA emphasized the importance of one-call notification systems by earmarking 10 percent of the total performance points states can attain in the 1993 grant allocation for compliance with the Federal minimum requirements for these systems. Similarly, RSPA focused on the importance of states assuming safety jurisdiction over all intrastate pipeline facilities by allotting 15 percent of the total 1993 performance points to this factor. RSPA is also requiring states which serve as Federal agents for inspecting interstate pipeline operators to have full intrastate safety jurisdiction by December 31, 1994, to maintain status as interstate agents.

RSPA staff met officials in Kentucky, Virginia, and Ohio to explain Federal requirements and encourage state compliance. In recognition of the value of this type of dialogue, the National Association of Regulatory Utility Commissioners passed a resolution encouraging state agencies having jurisdiction over pipeline safety to request assistance from RSPA in providing input and testimony to state legislative members pertaining to the importance of adopting critical Federal pipeline safety requirements.

**PLANNED FOR FY 1995:**

RSPA will focus on two primary objectives in funding state pipeline safety programs in FY 1995:

- First, existing state agencies participating in the gas and liquid programs need to continue to improve their program performance -- adopting Federal regulations and taking over safety jurisdiction for all intrastate pipelines. Continuing progress toward 50 percent funding is critical to provide incentive to states to bring their programs into full compliance with Federal requirements ($7,500).

- Second, additional state participation in the hazardous liquid program needs to be stimulated to address growing public concern about the environment and the prevention of spills from hazardous liquid pipelines. Start-up funds for certain one-time costs will be necessary to establish a credible program in those states where an agency other than the agency overseeing the gas program will handle the liquid program ($400).

Additionally, special initiative funds will allow selected state agencies to undertake high-priority projects, e.g., expanding safety jurisdiction, implementing/upgrading one-call notification systems. These funds will help states having difficulty in meeting certain Federal requirements to take steps necessary to come into compliance ($100).

**CONSEQUENCES OF NOT FUNDING:**

It is in RSPA's best interest to provide sufficient financial incentive to keep states in the pipeline safety program. States clearly bear the brunt of the inspection workload. State inspectors constitute over 90 percent of the combined state/Federal inspector work force. In 1992, states were responsible for conducting 95 percent of all pipeline safety inspections.

States are closer to pipeline operators and consumers, have a better understanding of local issues, and can more cost-effectively deliver a viable pipeline safety program than the Federal government. In return, states deserve to be reimbursed for their efforts as intended by Congress. Grant funding provides an effective approach to leverage resources and increase total inspection capability since states provide matching or greater funding.

The success of the Secretary's action plan for implementing recommendations in the environmental program review depends upon additional state assumption of safety jurisdiction over intrastate hazardous liquid pipelines. Expanded state participation is imperative in light of growing public concern over the soundness of those pipelines which pass through environmentally sensitive and high density population areas.

A shortfall in Federal funding acts as a disincentive for expanded state participation in the pipeline safety program. States are very much aware that the entire Federal pipeline safety program, including grants, is supported by industry user fees. Given the user fee base of the program, states find it difficult to comprehend why their costs cannot be reimbursed at the 50 percent level intended by Congress.

## DEPARTMENT OF TRANSPORTATION

## RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION

Intragovernmental funds:

**Working Capital Fund,**

### Volpe National Transportation Systems Center

The Working Capital Fund finances multidisciplinary research, evaluation, analytical and related activities undertaken at the Volpe National Transportation Systems Center (VNTSC) in Cambridge, MA. The fund is financed through negotiated agreements with the Office of the Secretary, Departmental operating administrations, and other governmental elements requiring the Center's capabilities. These agreements also define the activities undertaken at VNTSC.

## DEPARTMENT OF TRANSPORTATION
## RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION
## WORKING CAPITAL FUND, VOLPE NATIONAL TRANSPORTATION SYSTEMS CENTER

### PROGRAM AND FINANCING (in thousands of dollars)

Identification code 69-4522-0-4-407

| | | FY 1993 ACTUAL | FY 1994 ENACTED | FY 1995 REQUEST |
|---|---|---|---|---|
| | Program by activities: | | | |
| 10.00 | Total obligations | 225,263 | 228,000 | 238,000 |
| | Financing: | | | |
| 17.00 | Recovery of prior year obligations | (2,307) | | |
| 21.40 | Unobligated balance available, start of year | (173,015) | (183,896) | (179,896) |
| 24.40 | Unobligated balance available, end of year | 183,896 | 179,896 | 173,896 |
| | Budget authority: | | | |
| 68.00 | Spending authority from offsetting collections | 233,837 | 224,000 | 232,000 |
| | Relation of obligations to outlays: | | | |
| 71.00 | Total obligations | 225,263 | 228,000 | 238,000 |
| 72.10 | Obligated balance, start of year | (92,305) | (98,352) | (94,352) |
| 74.10 | Obligated balance, end of year | 98,352 | 94,352 | 88,352 |
| 78.00 | Adjustments in unexpired accounts | (2,307) | | |
| 87.00 | Outlays (gross) | 229,003 | 224,000 | 232,000 |
| | Adjustments to budget authority and outlays: | | | |
| | Deductions for offsetting collections: | | | |
| 88.00 | Federal Funds | (152,053) | (145,657) | (150,859) |
| 88.30 | Trust Funds | (81,342) | (77,921) | (80,703) |
| 88.40 | Non-federal sources | (442) | (422) | (438) |
| 88.90 | Total, offsetting collections | (233,837) | (224,000) | (232,000) |
| 89.00 | Budget authority (net) | | | |
| 90.00 | Outlays (net) | (4,833) | 0 | 0 |

## DEPARTMENT OF TRANSPORTATION
## RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION
## WORKING CAPITAL FUND, VOLPE NATIONAL TRANSPORTATION SYSTEMS CENTER

### OBJECT CLASSIFICATION (in thousands of dollars)

Identification code 69-4522-0-4-407

**Reimbursable Obligations:**

| | FY 1993 ACTUAL | FY 1994 ENACTED | FY 1995 REQUEST |
|---|---|---|---|
| Personnel Compensation: | | | |
| 11.1 Full-time permanent | 27,714 | 29,687 | 31,171 |
| 11.3 Other than full-time permanent | 2,630 | 2,126 | 2,232 |
| 11.5 Other personnel compensation | 761 | 781 | 820 |
| 11.9 Total personnel compensation | 31,105 | 32,594 | 34,223 |
| 12.1 Personnel benefits: Civilian | 5,717 | 5,991 | 6,290 |
| 21.0 Travel and transportation of persons | 2,241 | 2,767 | 2,684 |
| 22.0 Transportation of things | 218 | 223 | 228 |
| 23.3 Communications, utilities, and miscellaneous charges | 3,585 | 3,603 | 3,783 |
| 24.0 Printing and reproduction | 253 | 278 | 306 |
| 25.1 Consulting services | 1,786 | 2,500 | 2,625 |
| 25.2 Other services | 165,129 | 164,142 | 171,593 |
| 26.0 Supplies and materials | 4,217 | 4,318 | 4,418 |
| 31.0 Equipment | 9,740 | 9,974 | 10,203 |
| 32.0 Lands and structures | 1,263 | 1,610 | 1,647 |
| 42.0 Insurance claims and indemnities | 9 | | |
| 99.9 Total obligations | 225,263 | 228,000 | 238,000 |

### PERSONNEL SUMMARY

| | | | |
|---|---|---|---|
| Revolving Fund Civilian: | | | |
| Full Time Equivalent Employment | 597 | 576 | 576 |
| Full Time Equivalent of Overtime and Holiday Hours (Non-Add) | 1 | 1 | 1 |
| Total FTE | 597 | 576 | 576 |

## WORKING CAPITAL FUND:

## VOLPE NATIONAL TRANSPORTATION SYSTEMS CENTER

The John A. Volpe National Transportation Systems Center is the Department's only multi-modal research facility. The Center receives no direct appropriation; it is funded entirely by its clients through a working capital fund. Clients include all elements of the DOT and elements of other federal organizations concerned with transportation issues. The Center makes extensive use of private sector and university resources. Specifically, the Volpe Center mission is:

> *In support of Departmental policy objectives, the Center shall anticipate future national, state, local, and international transportation and logistics issues and requirements, and respond to current needs and priorities in accordance with its role as the national center of transportation and logistics expertise.*

The Center promotes an enhanced awareness of federal transportation issues. It assists in the advancement of federal transportation initiatives, serves as a bridge to industry and academia, and provides independent and objective policy level support concerning major systems acquisitions.

The Center's work involves all aspects of transportation including impacts on shippers and passengers. Consistent with the Secretary's statutory responsibility, the Center supports other Federal organizations with transportation-related matters. The Center complements the specialized modal-oriented capabilities of other DOT R&D elements with its capabilities for research, analysis, planning, management, and logistics aspects of transportation safety, security, systems modernization, and analysis for policy formulation. The Center also conducts multi-agency efforts within DOT on a consolidated basis. Examples include Technology Sharing, Small Business Innovation Research, and R&D Coordinating Council support.

The Center is also a key resource in DOT's defense conversion support to DOD's ARPA Technology Reinvestment Project and DOC's Advance Technology Program.

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